UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

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THE HONORABLE MARIANA R. PFAELZER, U.S. DISTRICT JUDGE
PRESIDING

NEUROGRAFIX,

Plaintiff,

vs.

No. CV 10-1990-MRP

SIEMENS MEDICAL SOLUTIONS USA,

INC.,

Defendant.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

LOS ANGELES, CALIFORNIA

WEDNESDAY, OCTOBER 5, 2011

## MOTIONS

DEBORAH K. GACKLE, CSR, RPR United States Courthouse 312 North Spring Street, Room 402A Los Angeles, California 90012 (213) 620-1149

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2.3
24
25
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1
    LOS ANGELES, CALIFORNIA; WEDNESDAY, OCTOBER 5, 2011; 11:10 A.M.
 2
 3
               THE CLERK: In the matter of calendar item 1, case
 4
 5
    No. CV 10-1990, NeuroGrafix versus Siemens Medical Solutions
     USA, Inc.
 6
 7
               Counsel, please state your appearances for the
 8
    record.
 9
               MR. FENSTER: Good morning, Your Honor. Marc Fenster
10
     with Russ, August and Kabat. With me today is Andrew Weiss and
11
    Fredricka Ung -- U-n-g -- and we're here on behalf of the
12
    plaintiffs.
13
               MR. LoCASCIO: Good morning, Your Honor. On behalf
14
     of the defendants, Siemens Medical Solutions and Siemans A.G.,
     Gregg LoCascio from Kirkland and Ellis, LLP, along with my
15
16
    partner, Sean McEldowney.
17
               THE COURT: Now, let's do it in the order it's here.
18
    Let's start with this motion for -- let's not do it that way.
     Just a minute.
19
20
               Let's start with the reconsideration motion, which is
    No. 3 on the calendar.
21
22
               MR. FENSTER: Your Honor, may I approach? I have
2.3
    binders with slides we'll be using today for the court and for
24
     the clerks.
25
               THE COURT: Thank you.
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1
               THE CLERK:
                           Thank you.
 2
               THE COURT: Have you seen these?
               MR. LoCASCIO: Yes, Your Honor. We exchanged them
 3
     when we got in this morning.
 4
 5
               THE COURT: All right. That's fine.
 6
               MR. FENSTER: Your Honor, we respectfully ask the
 7
     court to reconsider its ruling that claims 36, 39, 46 and 49
     are step-plus-function claims. The Federal Circuit has never
 8
 9
     applied step-plus-function claims to a method or process
10
     claims, ever. Every time that it has come up before the court,
11
     where the lower court applied step-plus-function claims, the
12
     Federal Circuit reversed. The only situation in which the
    Federal Circuit even allowed a step-plus-function construction
13
14
     to be applied was in the majority opinion in Seal-Flex, and
15
     that is the opinion in which Judge Rader penned his concurring
16
     opinion explaining why the court should have reversed the
17
     court's claim construction and held that it was not
18
     step-plus-function; and that is the Seal-Flex concurring
19
     opinion that this court cited in its claim construction order.
20
               Slide three, please.
               The application of a step-plus-function doctrine in
21
22
     this case is just contrary to Federal Circuit law. What Masco
2.3
     says is that, "... we are unwilling to resort to that
24
     provision" -- meaning Section 112, paragraph six -- "to
25
     constrain the scope of a claim limitation without a showing
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1
     that the limitation contains nothing that can be construed as
 2
     an act."
               Each of these claims are not written in
 3
    means-plus-function form.
 4
 5
               Next slide.
               First, they're not written in means-plus-function
 6
 7
     format, so they are presumptively not means-plus-function.
 8
    Moreover, it can't be construed unless there is a showing that
 9
     the limitation contains nothing that can be construed as an
10
     act.
11
               Now, the court goes further -- the Federal Circuit
12
     says that "Where a preamble" -- this is next slide, please --
13
     "Where a preamble sets off the steps of a claimed method with
14
     the phrase, 'comprising the steps of,' as opposed to 'the steps
15
     for,' that is further indication that the patentee did not
16
     intend to invoke Section 112, paragraph six." And that is how
17
    paragraph 36 is set out. It is a method including the "steps
18
     of," and then it goes through and lists the steps, the acts,
19
     which are exposing, exposing, sensing, vector processing and
20
    processing. Each of the claims that this court held were
     step-plus-function contain acts.
21
22
               Next slide.
23
               THE COURT: Because they have an "i-n-q" on the end
24
     of the verb?
25
               MR. FENSTER: No, Your Honor, not only that.
                                                              Each of
```

```
1
     the acts - a-c-t-s, acts - that are recited in claims 36, 39,
     46, and 49 are transitive verbs. "Processing" is "to operate
 2
     on." It is a verb with an object. It's a transitive active
 3
           That is true with "analyzing" and "combining." These
 4
 5
     are active verbs with objects. They are acts acting upon an
 6
     object.
 7
               The Federal Circuit in -- Judge Rader, in his
     concurring opinion in Seal-Flex, cited by this court, explained
 8
 9
     the difference and explained when an "i-n-q" verb -- or an
10
     "i-n-q" word should be an act and not a function.
11
               THE COURT: Yes, I know that.
12
               MR. FENSTER: And what the court said is that a
13
     function corresponds to what the element accomplishes, whereas
14
     "acts" correspond to how the function is accomplished.
               THE COURT: Let me shortcut this a little bit.
15
     realize that whoever drafted the claim was perhaps not
16
17
     intending this to be step-plus-function, and you're asking the
18
     court to look at what the person intended who drafted the
19
     claim.
20
               MR. FENSTER:
                             In part, but I'm asking the court to
     apply the Federal Circuit law. The Federal Circuit law says
21
22
     this claim is presumed not to be step-plus-function --
23
               THE COURT: I understand about the presumption; I'm
24
    not quarreling with that.
25
               MR. FENSTER: Yes. I think that the courts do look
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1
     to whether the patentee intended to invoke Section 112,
 2
    paragraph six, they do look to the language to see whether that
     intent was evoked, they look to the file history to see whether
 3
     or not the patentee intended to invoke 112, six. All evidence
 4
 5
     in this case undisputably indicates that the patentee did not
     intend to invoke 112, paragraph six. I agree with Your Honor
 6
 7
     that's not the end of the inquiry.
 8
               THE COURT: No, it isn't.
 9
               MR. FENSTER: So what we have to do is follow the
10
     analysis set forth by Judge Rader in Seal-Flex, and in
11
     Seal-Flex, that patent dealt with -- go back to seven -- you're
     on seven -- so that patent claimed "Spreading an adhesive tack
12
13
     coating for adhering the mat..."
14
               THE COURT: Let me cut through this point, too.
15
               MR. FENSTER: Okay.
16
               THE COURT: Is this claim that we're looking at a
17
     claim for software?
18
               MR. FENSTER: No.
19
               THE COURT: What is it?
20
               MR. FENSTER: It's a process claim. It's a method
     claim. This is claim 36, Your Honor. It's a method for
21
22
     utilizing an MRI machine.
2.3
               THE COURT: And a computer.
24
               MR. FENSTER: And a computer to determine the shape
25
     and position of a structure.
```

```
1
               THE COURT: Moreover, it's a standard computer, isn't
 2
     it?
               MR. FENSTER: No, I don't believe it is, Your Honor.
 3
               THE COURT: Well, now, who programmed the computer to
 4
 5
    do what you want it to do?
 6
               MR. FENSTER: A computer is not claimed in this
 7
    method claim. I think that there are process -- there are
 8
     apparatus claims in claims 54 and 55, in those claims, which do
 9
     claim the apparatus.
10
               THE COURT: Wait. How do you process the
     information, the data set at this -- on this limitation?
11
     do you process it? With a computer, don't you?
12
13
               MR. FENSTER: Yes --
14
               THE COURT: Wait. It's not just any computer, is it?
15
     It's one that is programmed.
16
               MR. FENSTER: The method claim does not specify, nor
17
     require, nor could it, the apparatus used to perform the steps.
18
               THE COURT: So you use whatever is at hand, do you
19
    not?
20
               MR. FENSTER: This claim would be met if that
21
    processing step is done with anything.
22
               THE COURT: That's right, with anything. But it has
2.3
     to be a programmed computer. It's a software step.
24
               MR. FENSTER: I disagree with the court's
25
     characterization, Your Honor. This is not -- this is -- it is
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1
     a process claim, it is a method claim. It is not limited to
 2
     any particular apparatus. It is improper and, in fact, would
     render the claims indefinite under IPXL if we had mixed
 3
     apparatus and method claims. This is not an apparatus claim,
 4
 5
     and I think that it is improper for the court to be looking --
 6
     to be thinking about this as an apparatus claim and what's --
 7
               THE COURT: All right, then. This is your broadest
 8
     set of claims. You just process however you process on
9
     whatever is at hand.
10
               MR. FENSTER: I disagree with that characterization
11
    as well, Your Honor.
12
               THE COURT: You tell me how to read it. You tell
13
    me -- all right. Let's get right to it. You tell me,
14
    Mr. Fenster, that this step, this limitation, do you see it,
     (e), is it?
15
16
               MR. FENSTER: Yes.
17
               THE COURT: You process the data representative of
18
     what you want to generate a data set describing the shape and
19
    position. Now -- et cetera.
20
               You do that on a computer which has been programmed
21
     to permit one skilled in the art to do it, right?
22
               MR. FENSTER: I think that the answer is right, but
2.3
     the question is irrelevant to the analysis of
24
     step-plus-function.
25
               THE COURT: Go ahead.
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```
1
               MR. FENSTER:
                             For step-plus-function, you only look
 2
     to see whether an act is recited, and Judge Rader counseled
 3
     us --
               THE COURT: All right. Let me just grant you this.
 4
 5
     I'm not purporting to have a real dispute with you, I'm trying
     to get out what you're saying. Let's assume it's not a
 6
 7
     step-plus-function claim, just as you say. Now you tell me the
 8
    processing is done some way by somebody, and but they have to
 9
     begin with a computer, don't they?
10
               MR. FENSTER: I don't believe so. So that is a fair
11
     question, Your Honor.
12
               THE COURT: You wouldn't have to begin with a
13
     computer? You said that in the patent.
14
               MR. FENSTER: I think as a practical matter that is
15
    how it's done, but as a matter of claim construction, no.
16
               THE COURT: Oh, well, but the processor is a computer
17
     under the patent.
18
               MR. FENSTER: But the claim -- this claim, claim 36,
19
     does not claim a processor, it claims a method, and I believe
20
     that it is -- that the court is confusing the analysis of the
    means-plus-function apparatus claims with this method claim in
21
22
     claim 36; and claim 36 requires the step of processing the data
23
     to perform a function, which is to generate a data set, and the
24
     act is processing.
25
               Now, it is a fair question to say, Well, what does
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1
    processing mean?
 2
               THE COURT: That's right.
               MR. FENSTER: Okay. So that is a fair question, and,
 3
     in fact, that's what the Federal Circuit did in -- I'll find
 4
 5
     the case in just a second. But when they found that it's not
 6
     step-plus-function, they remanded to the court to say, Okay,
 7
     determine what "processing" means or "determining" means.
 8
               THE COURT: That's precisely what I'm asking you.
 9
               MR. FENSTER: That is an absolutely fair question,
10
     and it's one that has not been presented to the court. And
11
    honestly --
               THE COURT: Oh, yes it has. Whether you have
12
13
    presented it or the court's presented it to itself, it has been
14
    presented.
               MR. FENSTER: Okay. Well, my apologies to the court.
15
16
     I don't believe that we have briefed the meaning of
17
     "processing" on its own.
18
               THE COURT: Okay. Then I will present it to you.
19
               MR. FENSTER: I'm not prepared to answer what
20
     "processing" means. "Processing" means to operate on the data
     in order to generate a data set. I am not prepared to offer a
21
22
     claim construction of processing right now because that's not
2.3
     where -- I apologize that I'm not.
24
               THE COURT: Well, wait. Let's just look at the --
25
    we're now on a controversy that I cannot resolve with you this
```

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1
           I'm saying to you, first of all, assume for a minute that
 2
     it's not step-plus-function. I understand what your objection
     to that is. You'd be limited to whatever is in the spec, and
 3
     you'd have to have a link with that, and there isn't anything
 4
 5
     in the spec except references. Wait. Let me -- I can clear up
     what is wrong with my thinking if I just point out to you that
 6
 7
     on column 11 -- we have to have this out now because if we
 8
     don't, we're going to -- column 11 says, A computer, 72, and
 9
     the front-end circuit, 74, form the processing system, 16, the
10
     input and the -- and so on and so on -- as shown in six.
11
     Computer, 72, and circuit, 74, cooperatively control and
12
     synchronize the operation of the MRI system, 14, as well as
13
     processing a display. The acquired data, the computer, 72, is
14
     an IBM-compatible personal computer. Then it tells you about
15
     it.
16
               Somebody's got to program the computer.
17
               MR. FENSTER: I agree with you that for the
18
    means-plus-function apparatus claims, we do have to analyze
19
     what is doing the processing because those were
20
    means-plus-function claims.
               THE COURT: Don't you have to do it now? If it's a
21
22
     software patent, irrespective of whether it's
2.3
     step-plus-function, wouldn't you have to have -- point out some
24
     way of programming or --
25
               MR. FENSTER: No.
```

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1
               THE COURT: No?
 2
               MR. FENSTER: Absolutely not. Your Honor --
 3
               THE COURT: So your skilled -- your person skilled in
     the art uses whatever is there.
 4
 5
               MR. FENSTER: If they process in order to generate a
 6
     data set to determine the shape and position, which is the
 7
     function recited, then they perform the steps set forth in the
    method. Now, it is a fair question to say, Do we need any
 8
 9
     further construction of processing the data or not?
10
               THE COURT: That's right.
11
               MR. FENSTER: We submit that it has a common,
12
     ordinary meaning, and the only challenge -- the only question
13
     raised before the court --
14
               THE COURT: What is its common, ordinary meaning?
     It's in here.
15
16
               MR. FENSTER: I think the common, ordinary meaning of
17
    processing the data is operating on the data in a way to
18
     generate the data set, but it's not -- the common, ordinary
19
    meaning is not the apparatus used or the software or the
20
     algorithm or the computer used to do it.
21
               THE COURT: Could you do it without a computer?
22
               MR. FENSTER: No. But, again, Your Honor, that is
2.3
     irrelevant to the question of whether this is
24
     step-plus-function, and if it's not step-plus-function, then
25
     we're in normal claim construction --
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1
               THE COURT: I am abandoning step-plus-function.
 2
     now saying to you let's assume for a minute that it's not.
               What flows from that conclusion?
 3
               MR. FENSTER: Okay. What flows from that conclusion
 4
 5
     is the court needs to determine if any claim construction is
     necessary as a normal act, as a normal word, "processing,"
 6
     whether that word is so unclear that the court needs to give
 7
 8
     quidance to the jury to tell them what "processing" means.
 9
     This is not a question that was raised before the court.
                                                               The
10
     only issue raised before the court on -- at the claim
11
     construction phase initially was what was Siemens' position
12
     that this is step-plus-function. That's it. We disagreed, but
13
     there was no alternative if it's not step-plus-function, what
14
     is the proper claim construction.
15
               THE COURT: You're asking the alternative now.
16
     asking.
17
               MR. FENSTER: And our position is it doesn't need
18
     claim construction, that it is just to operate on the data
19
     that -- processing the data is something that the jury will
     understand.
20
21
               THE COURT: How would they understand it?
22
               MR. FENSTER: It's not --
23
               THE COURT: Can't do it by hand.
24
               MR. FENSTER: I think -- I think it would be improper
25
     for the court -- if we go through a claim construction process
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1
     where we say, Okay, what is proper claim construction, and
 2
     defendant and plaintiff exchange proposed claim constructions
     and brief it to court, we'll come up with a proper claim
 3
     construction. That claim construction would not be limited to
 4
 5
     a particular algorithm or a particular apparatus for doing it.
 6
               THE COURT: No? Why?
 7
               MR. FENSTER: Because it would be improper to import
 8
     an apparatus limitation into a method claim. Method steps are
 9
     generally --
10
               THE COURT: So how does your expert explain to them
11
     what's to be done here? Your expert says you process on this
12
     computer that we have attached to the MRI machine.
13
               MR. FENSTER: Yes, but that doesn't mean -- just
14
    because the infringement analysis shows that a computer is used
15
     to perform that step does not mean that the proper claim
16
     construction would limit it to a particular apparatus or not.
17
               THE COURT: I want to put it very directly to you:
18
     Just any way you process would be infringing. I mean, you'd
19
    meet the infringement requirement for this limitation.
               Isn't that true?
20
21
               MR. FENSTER: Your Honor, claim 36 is a very specific
22
     claim. What it requires is that you use, in step (a) --
23
               THE COURT: Oh, I know what you do in step (a).
24
               MR. FENSTER: Well, Your Honor, this is important
25
     because this is -- you're asking me an open-ended question to
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1
     suggest that this is a very broad claim, and it is not.
 2
               THE COURT: Any way you process under your theory,
 3
     any way an expert will get on the stand and say, Well, there's
     always a computer attached to the MRI machine, and any way you
 4
 5
     process using that computer you're infringing.
 6
               MR. FENSTER: If you perform the step of processing
 7
     data representative of anisotropic diffusion to generate a data
 8
     set that describes the shape and position, then, yes, I believe
 9
     that that act --
               THE COURT: Any way you do it.
10
11
               Now, let's assume for a minute that the years go by
12
     and various companies come up with better ways to do that. It
13
     doesn't matter whether they have a better way or not, any way
14
     you do it will infringe.
               MR. FENSTER: Your Honor, I'm troubled by the
15
16
     court -- by what I perceive as the court's disposition to
17
     invalidate the patent.
18
               THE COURT: You are totally wrong. You are
19
     completely wrong, Mr. Fenster.
20
               MR. FENSTER: I hope so.
21
               THE COURT: I do really have to stop you right there.
22
               MR. FENSTER: Okay.
2.3
               THE COURT: You don't need to think that I have spent
24
     all these hours on this patent with the idea of invalidating
25
          I would not venture that if I were you.
```

1 MR. FENSTER: Okay. I apologize to the court. 2 THE COURT: You have absolutely no idea of the amount of time that's been spent on this, none. You have no idea. 3 And, consequently, you must not jump to the conclusion that you 4 5 jumped to. I don't want to do you a disservice; I do want to 6 understand what you're talking about. 7 MR. FENSTER: Okay. So, Your Honor, the --8 THE COURT: That's my job. 9 MR. FENSTER: I appreciate that, Your Honor. 10 The processing step -- so in a claim -- in a claimed 11 method, you look to determine whether a method is comprised of 12 certain steps that accomplish certain functions that are recited. If those acts are performed, then the claim is met --13 14 and, yes, it may be that after-developed technology further 15 improves the processing, that's not -- if anything, that's an enablement question, it's not a claim construction and it's not 16 17 an infringement question. But the case law, as I understand 18 it, has developed such that when a claim specifies the acts in 19 a method claim or the elements of an apparatus claim, it is 20 broad enough to encompass certain after-developed technology. 21 And so, yes, I do agree that if someone performs the 22 steps as recited in claim 36, however they do it, with whatever 23 apparatus they do it, claim 36 will be infringed. That is my 24 understanding of claim 36, and I believe that it's fully 25 supported from a 112 perspective in terms of enablement by the

```
1
     specification.
                     The specification fully enables how to perform
 2
     each of the steps of claim 36 and that's what the law requires.
    And then if -- see what comes up with a new and better MRI
 3
    machine or a new and better algorithm for processing but still
 4
 5
     performs the steps of these methods, it's covered.
 6
               THE COURT: You and I perfectly agree on your
 7
    position, perfectly.
 8
               MR. FENSTER: Okay.
 9
               THE COURT: But there's no reason why we can't
10
     discuss it, is there?
11
               MR. FENSTER: Not at all, and I love the discussion,
12
     I really do.
13
               THE COURT: Well, let me tell you: It was hard to
14
     get to this point. That's what you're saying, isn't it?
15
               MR. FENSTER: Yes, Your Honor.
16
               THE COURT: Let me hear from the other side.
17
               MR. FENSTER:
                             Sure.
18
               MR. LoCASCIO: Good morning, Your Honor.
19
               THE COURT: I'm not on your side.
20
               MR. LoCASCIO: I don't come in anticipating that the
21
     court, in any court, much less this one, leans one way or the
22
     other. My view is Your Honor's job, and you've done to date,
2.3
     call them balls and strikes, to interpret the law.
24
    what the court, as I understand it, is here to do.
25
     claim construction in a nutshell, and I don't think either
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```
1
     side, frankly, disagrees with that, Your Honor.
 2
               THE COURT: All right.
               MR. LoCASCIO: Let me start off with -- two questions
 3
     Your Honor asked. I just want to give an answer to those as
 4
 5
     you asked them. I was looking through the patent and thinking
 6
     about some of those issues, and now I want to walk through some
 7
     points we prepared on this, Your Honor.
 8
               First off, I think Your Honor identified exactly
 9
     where in the patent the processing is described, and that was
10
     column 11. I believe Your Honor was reading from line nine
11
     through about 16 or 17.
12
               THE COURT: Right.
13
               MR. LoCASCIO: The distinction between the apparatus
14
     and the method claims are the apparatus, as Your Honor
15
     determined, covers this black box to process. It's
16
    means-plus-function --
17
               THE COURT: Right.
18
               MR. LoCASCIO: The method claims cover using that
19
    black box to process. That's the difference between those
20
     claims. And either the step-plus-function claims are
     step-plus-function without any identified structure, which is
21
22
     what Your Honor found, i.e., indefinite; they are
2.3
     step-plus-function with structure, which you'd have to go back
24
     to the specification to find it. There is none. Or, on
25
     Mr. Fenster's analysis, that we just go ordinary meaning and
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1 ignore 112, paragraph six. At that point, what would happen to 2 this claim is it would be not enabled. There's no route through this. Mr. Fenster would 3 like to have it not be a claim construction issue, but nowhere 4 5 in this patent does it tell you how you would do that processing. I want to talk about how it is step-plus-function 6 7 under 112, six, and Your Honor's construction of that is correct and consistent with Federal Circuit law. 8 9 But even if the hypothetical Your Honor played out 10 with Mr. Fenster of it's not step-plus-function, Well, where do 11 we go from there from a claim construction standpoint? 12 NeuroGrafix' view would be you need do nothing. I disagree. But the ultimate outcome of doing nothing would then create the 13 14 very same problem that's recognized when you actually look at what does it describe to perform this. There's no enablement 15 16 at all of this, and, indeed, it's not an issue for today, 17 although it's now, sort of, become one a little bit. 18 The inventor -- one of the inventors, Dr. Tsuruda, 19 testified that at the time they filed this, they had no 20 software algorithm to do it, they'd never done it. It was a, Hey, wouldn't it be great if we could do this? 21 22 And the way they've claimed it, it's 23 step-plus-function. At the end of the day, if it wasn't, it 24 wouldn't be enabled. But let me, sort of, back up now to the 25 step-plus-function analysis and start off where Mr. Fenster

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1
     did.
 2
               What's the state of the law? Well, the Federal
     Circuit law we can look at, we can talk about. I want to talk
 3
     about the four primary cases at issue --
 4
 5
               THE REPORTER: Excuse me. Counsel, please slow down.
 6
               MR. LoCASCIO: Sure. Pardon me. Thank you for
 7
     letting me know.
               Thirty-five U.S.C. 112 is the law, and it says you
 8
 9
     can have means-plus-function and step-plus-function. And
10
     NeuroGrafix' position seems to be there's no such thing as
11
     step-plus-function. There are points in the reply brief where
12
     they say if it could even be found -- if claims could ever be
13
     found to be step-plus-function, well, that's certainly not the
14
     law. Paragraph six of Section 112 of 35 U.S.C. makes clear
15
     they exist. And let's look at what the Federal Circuit has
16
     actually said.
17
               The key is what does the claim say? It all comes
18
    back to not what the inventors intend, absent disclosure of
19
     that --
20
               THE COURT: Well, it is a, kind of, general rule
     about how to write it. There are some general rules about how
21
22
     to write these things.
2.3
               MR. LoCASCIO: If we look at the section we're
24
     talking about --
25
               THE COURT: (E).
```

1 MR. LoCASCIO: (E), exactly. Claim 36(e), processing 2 the data to generate. And the difference between this and the claim language in the earlier Federal Circuit cases is -- let's 3 talk about Seal-Flex last -- okay -- the other three, Cardiac 4 5 Pacemakers, Masco and O.I. Corp. The claim language in those is not a "step for" or a "step to" or something akin to a verb 6 7 "processing to" or "processing for." The language -- I have just my notes on these. We 8 9 can pull the actual case up. But Cardiac Pacemakers, for 10 instance, is determining a condition -- zoom out here -determining a condition of the heart from among. That is a 11 12 traditional piece in a method claim, it's a step, but it 13 doesn't have function. It's not a "step for" doing anything. 14 It's just determining a condition. It's not surprising that the Federal Circuit said that's not 112, six. 15 16 Masco is transmitting a force applied to a dial or 17 applied to a knob. Again, it's not a "step for" or "step to" do anything. O.I. Corp., passing the analyte slug through a 18 passage, et cetera. Again, there's not a verb "to do" 19 20 something in any of those. So the fact that the Federal 21 Circuit in each of those cases said it's not 112, six shouldn't 22 surprise anyone? 23 In Seal-Flex, by contrast, it is spreading adhesive 24 tack for adhering. So what you have is a verb, "spreading," to 25 accomplish something: Spreading for adhering. And that is

1 akin to the situation we have here because the language here is 2 "processing the data set to generate." And in Seal-Flex, the court said the parties agreed it was 112, six, even though it 3 wasn't presumptively so, and that was left standing on appeal. 4 5 In this case, we have similar language. We have "processing the data to generate a data set." So it comes down 6 7 to is it presumptively means-plus-function? They don't use the 8 magic words "step for," although I want to -- actually, I left 9 the clicker over there. 10 Sean, can you just type slide seven? 11 Your Honor, may I approach with some slides? 12 THE COURT: Do. 13 MR. LoCASCIO: Thank you. 14 And what we see here in slide seven, Your Honor --15 I've got it on the screen, as well, is -- pardon me. What we 16 handed Your Honor has several sections. We put them in the 17 order we had wrongly anticipated we might proceed through here. 18 So there is a tab called "Step-plus-function," which is the 19 last tab, and slide seven in that deck is what I've got on the 20 screen right now, which talks about how processing doesn't describe or cite an act. And Mr. Fenster put up some 21 22 definitions of processing and analyzing. Those were not in the 23 briefing on Markman; what I've got on the screen was. 24 On the right side in slide seven is a dictionary 25 definition of "processing," and it's previously before Your

```
1
             "Processing" means put through the steps of a
 2
     prescribed procedure. And if you look then below, the O.I.
     Corp. quote on page seven, steps -- "We interpret the steps to
 3
     refer to the generic descriptions of elements of a process."
 4
 5
               So by using "processing," Your Honor, in some ways
    we've just synonymized "steps" and "processing." The
 6
 7
     definition of "process" is to put something through certain
 8
     steps. The court -- the Federal Circuit has determined "steps"
 9
     to be a generic description of the elements of a process,
10
     whereas "acts" refers to how to actually do it.
               So the idea that "processing" tells one how to do it
11
12
     is inconsistent with the ordinary meaning and definition of
13
     "processing," which means put it through steps.
14
               At the end of the day, this claim, Your Honor, is
15
     not -- I'm not arguing it's presumptively step-plus-function --
16
               THE COURT: You can't.
17
               MR. LoCASCIO: I'm not. We agree that I can't
18
    because -- and I'm not.
19
               But the language that they actually used here is
20
     virtually synonymous with saying "steps to generate" because
     given they've said "processing to generate." And whether that
21
22
     was artful to try to avoid the presumption or not, doesn't
23
    matter. The specification in the file history here never
24
     describe -- never give any indication that we should deviate
25
     from how this claim is written. And how the claim is written,
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1
     you have to come back to, Your Honor, how the function is
 2
     accomplished. If I back up a slide, to slide five, the act
    here --
 3
 4
               THE COURT: Well, Mr. Fenster says that it doesn't
 5
    matter how you do it.
               MR. LoCASCIO: The Federal Circuit in Seal-Flex and
 6
 7
     O.I. Corp. say you have to describe in your claim how to do it,
 8
     and if you do not, while the presumption may exist in one
 9
     direction, it would be overcome and rebutted, as Your Honor
10
     found, in the Markman decision if they don't describe it.
11
               THE COURT: Well, let's just assume, because
    Mr. Fenster does not want a step-plus-function analysis of this
12
13
     claim because it would limit him to what is in the spec, and
14
     there isn't anything in the spec. And, consequently, we have
15
     to take another tack here for the purpose of discussion.
16
               Let's assume for a minute that the motion to
17
     reconsider is granted and it's not construed as a
18
     step-plus-function claim. What then?
19
               MR. LoCASCIO: If it's not construed as a
20
     step-plus-function at all, and, obviously, I expect Your Honor
21
     already recognizes that we disagree with that presumption.
22
               THE COURT: Of course.
23
               MR. LoCASCIO: I know. Just wanted to make clear
24
     that any reader of this later in life says, Okay, Mr. LoCascio
25
     didn't say we were onboard with this.
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1
               If that was the case, I think you'd have an issue
 2
     where, if it was ordinary meaning -- which is Mr. Fenster's
     only proposed construction for this -- then you'd have a
 3
     situation where the claim is not enabled.
 4
 5
               THE COURT: Is what?
 6
               MR. LoCASCIO: Not enabled. That's where I think
 7
     that would go.
               THE COURT: Is it described?
 8
 9
               MR. LoCASCIO: I don't believe how to accomplish
10
     it -- which would be what you would need to describe here -- is
11
     anywhere in this specification, Your Honor. All it says is you
12
     could use a computer to process, but it doesn't tell you what
13
     that computer would have or frankly how you would do this.
14
               THE COURT: Let's go to the next step.
15
               MR. LoCASCIO: Okay.
               THE COURT: Let's assume that, whatever meaning you
16
17
     give it and that an expert gets to testify about how this would
18
    be done, there is no limitation on infringement with respect to
19
     this limitation, is there?
20
               MR. LoCASCIO: I agree. There would be none.
     this point, it's using an MRI machine and processing it in some
21
22
     way to generate this data.
2.3
               THE COURT: No, it's using an MRI machine and a
24
     computer.
25
               MR. LoCASCIO: Correct, Your Honor, and the computer
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1
     of some sort does some sort of processing that is undefined,
 2
     and if that happens, ergo, you infringe.
               THE COURT: Well, now, what's the -- let me also
 3
    pursue one other avenue. If it's pointless to you, still
 4
 5
     answer it.
 6
               MR. LoCASCIO: I would have anyway, but thank you for
 7
     reminding me.
 8
               THE COURT: All right. Where is the point of novelty
 9
    here?
10
               MR. LoCASCIO: Your Honor raises a question that we
11
     identified as well. And if I can go --
               Sean, type 28. Flip there.
12
13
               THE COURT: Where am I?
               MR. LoCASCIO: Slide 28, Your Honor. Slide 28 looks
14
15
     to what does this limitation matter? Is this the point of
16
    novelty or not?
17
               THE COURT: Just one second.
18
               MR. LoCASCIO: Sure.
19
               THE COURT: Oh, I see. All right.
20
               MR. LoCASCIO: What Slide 28 talks about in the
     context of Cardiac Pacemakers -- because in Cardiac Pacemakers,
21
22
     the limitation at issue, which was not a verb "to do" something
2.3
     or a verb "for doing" something, talked about how that step was
24
     frankly not the point of novelty.
               Here, NeuroGrafix is -- the processing piece of this
25
```

1 claim is, in fact -- was described as the point of novelty. These are plaintiff's, NeuroGrafix's, opening and reply Markman 2 briefs. The first quote -- this is the bottom of the page --3 the inventors figured out how to create three-dimensional data 4 5 sets representative of neural tissue. Okay. Putting aside 6 that the only testimony to date is that they hadn't. Where is 7 that in the patent? It's nowhere. It's not described, it's 8 not disclosed. They don't tell you how to do it. 9 And so with respect to these claims, Your Honor, the 10 use of this term, "processing," in these claims to generate a 11 particular data set, that is the point of novelty. And as 12 Honeywell and other cases say, where we're talking about the 13 alleged point of novelty, we can't just gloss over the 14 indefiniteness issues because that's the core of the matter. 15 If you don't look to see if they actually describe it and describe in this case the way of performing, the "how" to 16 17 perform that function, well, then, the claim is, as you 18 identified, very broad -- charitably, what is called very 19 broad. 20 And the point of novelty in which they obtain a patent was that improvement, which is never described or 21 22 discussed anywhere and now would be, in essence, read out of 23 the claim because the claim would be so broad as to encompass 24 any way to do it, regardless of the alleged novel improvement 25 over the prior art. So, hopefully, that answers Your Honor's

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question on that score.
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 2
               THE COURT: Well, let's let Mr. Fenster speak now.
               MR. FENSTER: Your Honor, first, let me just correct
 3
     what Mr. LoCascio said regarding the four primary Federal
 4
 5
     Circuit cases. First, with respect to Masco, he said that it
     was different than this case because it was transmitting a
 6
 7
     force but didn't say to do something. The language of -- and
 8
    he didn't have the case in front of him. I put the case on the
 9
     Elmo for the court. Here is the language that Masco -- that
10
     the Masco Federal Circuit court looked at, that it was
11
     transmitting a force applied to the dial to drive the lever.
12
     Just like this case is processing to generate a data set, just
13
     like in Seal-Flex, it was adhering -- or spreading the adhesive
14
     to adhere. And in that case, Masco reversed the lower court --
15
     lower court's finding that it was step-plus-function.
16
               In Seal-Flex, while the majority opinion left alone
17
     and just did not address the parties' agreement that
18
     step-plus-function applied, it is Judge Rader's thoughtful
19
     concurrence, that this court cited in its claim construction,
20
     which did go through and say not withstanding the parties'
21
     agreement, I think it incumbent upon the court to analyze the
     112, six issue --
22
23
               THE COURT: So do I.
24
               MR. FENSTER: -- and doing so, Judge Rader found it
25
     was improper to apply step-plus-function notwithstanding the
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1 parties' agreement. 2 THE COURT: I think he's right about what he says here, that you must analyze it, and that is why I asked you all 3 4 the questions I asked you. 5 MR. FENSTER: So, now, with respect to -- you asked 6 what is the point of novelty and would this cover any method? 7 And, Your Honor, I have to object to Mr. LoCascio's 8 characterization, and the court's, to this extent: That it 9 would cover any method. Claim 36 is a very specific method, 10 and the point of novelty, Your Honor -- and if you'll allow me 11 to just walk through the claim -- this is a specific claim. 12 This requires exposing to a predetermined arrangement of 13 diffusion-weighted gradients and vector processing in order to 14 generate a data set that shows the nerve, as distinguished from 15 surrounding structures that do not show diffusion anisotropy. THE COURT: Yes, I know. 16 17 That is the point of novelty of this MR. FENSTER: 18 The point of novelty of claim 36 is this combination of 19 using a predetermined arrangement of diffusion-weighted 20 gradients and vector processing in order to generate the data 21 set in order to show the nerve in a way that was previously 22 unknown. 23 This is an important invention, Your Honor. 24 used daily to materially help people. A very dear friend's 25 daughter yesterday got a neurogram of her face to show how to

1 correct some surgery -- how to surgically correct some damage 2 that was done to her nerves during brain cancer surgery. is important: Up until 1992, it was unknown how to image 3 nerves outside of the brain and cerebral spinal fluid. 4 5 University of Washington has this patent now that describes lots of different methods for doing it. The method 6 7 of claim 36 is different than the other claims. The method of 8 claim 36 is specific and it's limited to the specific 9 combination of diffusion-weighted gradients and vector 10 processing in order to show the image separate from -- to 11 generate this data set. That's the point of novelty. 12 And when we get to enablement, we'll show enablement, 13 and when we get to anticipation, we'll see whether Siemens can 14 come up with any piece of prior art that shows a combination of 15 a predetermined arrangement of diffusion-weighted gradients and 16 vector processing. I have yet to see that prior art. But that 17 is the point of novelty of this claim. 18 So, Your Honor, in terms of your question of where do 19 we go next, if the court perceives that further construction of 20 processing as an ordinary term and not a step-plus-function term is warranted, then I suggest that we go ahead and brief 21 22 that issue. We'll exchange --23 THE COURT: What does "processing" mean? 24 MR. FENSTER: Exactly. We'll go ahead and exchange

proposed constructions. It's not something we did before

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1
     because the only issue was whether it was step-plus-function,
 2
     and Siemens didn't urge an alternate claim construction in the
     event it lost the step-plus-function proposal.
 3
               So what I would suggest is if the court wants --
 4
 5
     thinks that further explanation or construction or processing
     as an ordinary term is warranted, let's have an expedited, or
 6
 7
     not, claim construction process where we exchange terms and
 8
    brief it for the court to decide. I don't know that a separate
 9
     hearing is necessary, but the court -- that's obviously within
10
     the court's discretion.
11
               THE COURT: All right. Let's go on to the others.
12
               MR. LoCASCIO: Your Honor, if I may. Before we get
13
     there, I just want to raise one point. That's -- I think all
14
     of us now agree that the analysis of Judge Rader in Seal-Flex
15
     is what needs to be done; I contend the court has done that.
16
    And indeed --
17
               THE COURT: I have done that. I don't care whether
18
     you think it's done in writing or we have covered it.
19
     what prompted all this.
20
               MR. LoCASCIO: And my point is only that the claim
21
     language here, Seal-Flex says you have to look at it. And in
22
     Seal-Flex -- ultimately, Judge Rader, when he does look at it,
23
     says this is, despite the presumption, 112, six,
24
     step-plus-function, but it does, in fact, disclose how to do
25
     it. And in that case, quite differently than here. The two
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1 verbs -- if we can think of that -- are "spreading" for 2 "adhering," and doesn't just say, Figure out how to adhere. says "spreading an adhesive tack coating," and the court 3 found -- or Judge Rader found that that was a description of 4 5 how to adhere the mat to the foundation. THE COURT: Well, here's my problem: He wasn't 6 7 looking at a software patent. MR. LoCASCIO: I agree. He found structure -- he 8 9 found a way to do it there because it described one. And I 10 think there is some analogy with respect to software patents, given the federal circuit's -- call it criticism of generic 11 12 "processing means" claims. In the means context, the term "processor" has been described and found to be insufficient to 13 14 satisfy. A "processing means" or a "processor" is not enough 15 without an algorithm. And those are the Aristocrat and other 16 cases that we've talked about in the original round on this. 17 And so I agree the uniqueness of a software 18 implementation, as here, if -- as we see in claim 36(e), here 19 "processing" to generate. The function, Your Honor, no one --20 nothing in this claim tells one how to do it. And so just like the analysis that Seal-Flex requires, the analysis here is, 21 22 Well, does that tell me enough about how do it? In Seal-Flex 23 they did. Here, they do not. And no one from NeuroGrafix 24 identifies any specifics in the claim where it would need to be 25 or either in the -- or even in the specification about how one

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1
     actually does that processing. And absent that, when you have
 2
     language here that has a function of generating a data set,
     with the only thing perceived by even NeuroGrafix to be an act
 3
     of processing, whereby, every account, it's done through some
 4
 5
     computerized means, that alone is insufficient to satisfy their
     obligations under 112, six.
 6
 7
               This is a case where the presumption is overcome and,
 8
     indeed, there is no description of how. The act, as it would
 9
     be argued by NeuroGrafix, of processing is just taking steps,
10
     taking steps to generate. And if they said it that way, it
11
     would be prima facie 112, six. They didn't. They used the
12
     word "processing," but it had no description, Your Honor, of
13
     the key question from all of the Federal Circuit precedents,
14
    how to do it.
15
               THE COURT: Let's go on.
               MR. FENSTER: Your Honor, may I briefly address this
16
17
    before we go on and lose the point? May I respond?
18
               THE COURT: I will never lose the point that -- what
19
     we're talking about.
20
               MR. FENSTER: We're about to move to a different
21
    motion. May I just respond on this?
22
               THE COURT: Yes.
23
               MR. FENSTER: Your Honor, Mr. LoCascio urges that
24
     "processing" doesn't mean anything and it is, therefore, not an
25
     act. It is contrary to the Federal Circuit's decisions.
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1 Cardiac Pacemakers, the court looked at determining -- the 2 claim language in Cardiac Pacemakers was "determining a condition of the heart from among a plurality of conditions of 3 the heart." 4 5 Now, two things about this: One I would submit, Your Honor, that "determining" is no more generic than "processing," 6 7 That "determining," which was found to be an act sufficient to 8 reverse a step-plus-function finding in Cardiac Pacemakers, is 9 just like processing. The steps of "determining" -- Mr. 10 LoCascio could make the exact same argument with respect to "determining," and the Federal Circuit went the other way. 11 12 The other important point about Cardiac Pacemakers is 13 that this is software. How do we think that the determining a 14 condition of the heart was done? It was done with software just like this. And, Your Honor, there is no support in 15 16 Federal Circuit or other case law that I found to suggest that 17 the step-plus-function analysis, as to whether a recited verb 18 is a function or an act, is different in the software claim, or 19 in a claim that involves software, than in a claim that 20 doesn't. 21 There is nothing to suggest -- and I haven't gone 22 through and specifically analyzed all of the cases to see did 2.3 this involve software or didn't it, but there has never been a 24 distinction drawn by the court as to determining whether 25 something is an act or a function based on whether or not

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1
     software is involved. And, Your Honor, just based on the few
 2
     cases that we have before us today, I would suggest that
     Cardiac Pacemakers suggests that it doesn't and that that is
 3
     not a valid distinction to find a step-plus-function contrary
 4
 5
     to the great weight of law.
 6
               Second, let me point out that Caterpillar, which is a
 7
    Northern District of Indiana case, which was cited by the
 8
    defendants for step-plus-function analysis, and it was affirmed
 9
     without opinion by the Federal Circuit. The Caterpillar case
10
     involved four recited acts or functions. They were
     "providing," "determining," "retrieving" and "using."
11
12
               And this is at 961 F. Supp. at 1256, I believe, where
13
     it says, "Claim one involves the actions of providing,
14
     determining, retrieving and using."
               Again, "determining," just like in Cardiac
15
     Pacemakers, was found to be an act. It was not a generic.
16
17
     what Mr. LoCascio is now arguing, that it doesn't tell you how
18
     you determine, is exactly the argument that was rejected in
19
    Masco, where the Federal -- where the defendant argued that the
20
     transmitting -- a force was a step-plus-function, but it
     doesn't tell you how to transmit the force. And what the
21
22
     Federal Circuit said -- is it rejected that argument. It said
2.3
     that it doesn't have to tell you exactly how, it is enough
24
     that -- transmitting a force does describe how the lever is
25
     driven then into the cam. And it was the lower court that
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1
     reasoned that the word "transmitting," without more, does not
 2
     explain how the force is transmitted. That's exactly
    Mr. LoCascio's argument here, that we don't say how the data
 3
     set is processed.
 4
 5
               And what the Federal Circuit said is it reversed and
     said transmitting a force does describe how the lever is driven
 6
 7
     into the cam. Just as in this case, how the data set is
 8
     generated is by processing. And so we urge the court to find
 9
     that there is no step-plus-function.
10
               THE COURT: All right. Let's go on.
11
               MR. FENSTER:
                             Thank you, Your Honor.
12
               MR. LoCASCIO: My suggestion would be to go to the
13
     conspicuity.
14
               THE COURT: Fine. Let's do that.
               MR. LoCASCIO: So, Your Honor, the first -- the
15
16
     second tab in the slide that we handed up called "conspicuity"
17
     are the slides I'm going to walk through now on this question.
18
     And as Your Honor knows, in claims one, claims three, seven,
19
     11, 12 and 18 and their dependent claims there is a conspicuity
20
     of a nerve that is at least 1.1 limitation. And with respect
     to that, what Siemens raised in its Markman briefing were two
21
22
     questions: How does one calculate the conspicuity, and then
2.3
     how would a user choose -- one of skill in the art choose an
24
    ROI, or a region of interest, to measure that conspicuity.
25
               And with respect to that second question, the court's
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Markman decision identified that this was an open question. Siemens made a persuasive showing that this underlying method of selecting a region of interest -- on slide four of the deck -- in the calculation of conspicuity is a subjective inquiry that renders the claim indefinite. And what came out of that from Your Honor's decision were two core questions: experts agree on the method of making ROI selections and whether the infringement or noninfringement would depend on who actually makes that measurement, because that would be the textbook case of indefiniteness if expert one for the plaintiff says, I measured it, I used an ROI, it infringes; expert for the defense says, I measured it, I used an ROI, it does not infringe. The patent itself must in that situation disclose or explain how one does that so that those calculations and the question of infringement or noninfringement is consistent. And based on Your Honor's order, we had a telephone conference and we laid out a whole plan to deal with this, and the plan was we'd have nonexpert discovery, we'd have expert reports -- and both sides submitted them -- and then we'd file briefs. And for Siemens, Dr. Bryan, who was the expert specifically on this question of conspicuity, he's new to this phase for the -- pardon me -- for the defendants. For the plaintiff, it's Dr. Brant-Zawadzki. Dr. Bryan and Dr. Brant-Zawadzki are practicing radiologists. The core difference between them, insofar as it matters for this motion,

1 is Dr. Bryan actually calculated regions of interest in 2 conspicuity measures. Dr. Brant-Zawadzki for NeuroGrafix, before he was retained in this case has never done so for a 3 nerve that would qualify under any of these claims, and in the 4 5 course of his retention, was neither asked to nor performed a single ROI or conspicuity calculation. 6 7 Prior to this round, in the original Markman 8 submissions, there were -- each side had an expert: 9 Dr. Moseley for NeuroGrafix, he had done ROI and conspicuity 10 calculations, and Dr. Filler, one of the inventors of the 11 patent at issue, and the plaintiff, he had also done ROI and 12 conspicuity calculations. 13 To the court's question: Is there an agreed-upon 14 standard in the field for creating or drawing an ROI? All the evidence in this case is no. There is no standard. 15 16 NeuroGrafix concedes the point, and we'll walk through that. 17 Second, does the patent leave it to the user, or does 18 the patent, despite their no industry standard, tell you this 19 is how one does it, and the answer is no, the patent does not, 20 and we'll walk through that. Third, which is the second part of Your Honor's 21 22 question is, okay, if there's no instruction of how to do it, 2.3 if it's done differently, do you get to different results?

Because at base, if you do, the claim is indefinite. And I

want to walk through the fact that we have expert testimony,

24

25

1 both documentary records and publications that say there is a 2 difference -- if you do it differently, you get different results. Indeed, Dr. Filler's own calculations showing that 3 the same person can end up falling within the claim on image 4 5 and falling outside of the claim. 6 Specifically, with respect to is there a standard. 7 We have on slide nine, Dr. Brant-Zawadzki for NeuroGrafix had 8 never done so before for a nerve. His knowledge of ROI comes 9 in other context, but even on that, he says there is no 10 industry standard. First, data point on this is defendant's 11 12 uncontroverted facts, on summary judgment motion, was there is 13 no industry standard for selecting an ROI, there is no one way 14 in the industry. NeuroGrafix's response to that is not to dispute that fact. They dispute it's a material fact. We can 15 16 debate that. It's not a material fact in dispute because we'll 17 see their own expert says there is no standard. They only 18 dispute that to the fact that the extent that implies 19 conspicuity is not taught. 20 So with respect to the uncontroverted facts, they don't take issue with the fact that there's no one standard. 21 22 Dr. Bryan in his opening report says there's no recognized 23 standard, and when you ask Dr. Brant-Zawadzki, who didn't say 24 anything about this in his report, is there an industry

standard? Do you disagree with Dr. Bryan? He says -- this is

25

1 on slide 11 from the deposition -- Well, there's no industry 2 standard one way of doing it. The parties -- the experts agree that there's no 3 industry standard to do it. The literature in the field 4 5 confirms that. Despite many ROI options, there's no consensus. 6 This is an article -- the Ozsunar article that is cited in 7 Dr. Bryan's report. 8 On slide 12, what actually is the language of 9 specification, and this is what Dr. Brant-Zawadzki for 10 NeuroGrafix looked at when he said there are a lot of different 11 ways you can do it, and the patent, indeed, tells you -- for lack of a better term -- use whatever you want to do it. It is 12 13 left to the user. This is column 14, lines 54 to 62. Each ROI 14 may be a single pixel or voxel, or a larger region. 15 ROI selection can be performed manually, for example, 16 to moving a cursor around and over the ROI. Alternatively, it 17 can be accomplished automatically. 18 So the specification doesn't tell you to use a 19 particular method or there is one to be used for this patent. 20 It says the ROI to be used in this analysis can be used in a 21 variety of ways, and it is left to you. 22 If it's done manually, there's no instruction or 23 direction about that size, what shape, how to place the ROI. 24 If it's done automatically, it doesn't tell you what algorithm 25 to use, what settings to use or anything of the sort. So the

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     specification doesn't teach you which method to use.
                                                            The
 2
     experts agree on this.
               Siemens' expert, Dr. Bryan, says it simply leaves
 3
     open the possibilities of using any method of selecting an ROI,
 4
 5
     of which there are many. NeuroGrafix's expert,
     Dr. Brant-Zawadzki, agreed in his deposition. This is slide
 6
 7
     14, his dep at 108 to 109. The patent itself says there can be
 8
     a host of different ways to do it. He says it gives examples
 9
     of three, I guess, right there. And I said:
10
               "One is single pixel or voxel, one is automatic, one
11
     is a larger region selected manually.
12
               "Correct.
          "QUESTION: It doesn't say which of those is the right
13
14
     one to use or which of those to use to determine
     conspicuity, correct? It leaves that to the operator.
15
16
          "ANSWER: Right.
17
                      You'd agree with me different operators
          "QUESTION:
18
     could select different methods of selecting the region of
19
     interests?
          "ANSWER: Yes."
20
               There's no disagreement from either side that the
21
22
    patent leaves it to the user. They admit it allows -- even
23
    NeuroGrafix's opposition brief, which now tries to point to a
24
    particular method, which I'll get to, this thresholding idea,
25
     they even in their own brief say, Well, there are other methods
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that the patent teaches, as well. So even now, faced with the prospect of this being definite, they still can't point to because there is no place in the patent specifically tells you how to do it.

Their fallback argument to this is, Well, we couldn't have be more precise. We said everything we could say to the user about this.

Their own expert, and the literature, show that to be not -- that's not the case. First, we've got references first on this slide 17, is the reference called Bonekamp witnesses -- Dr. Bryan talks about this; Dr. Brant-Zawadzki was asked about in his deposition. This is example in the art of how people describe an ROI when they want consistency -- when you want to know if someone down the road can do the same calculation and get a consistent, predictable result.

And here you'll see in this Bonekamp reference, eight lines of text telling the user, Here's how to do it. Use an ellipsoid ROI. Place it on the long axis of a particular fiber track. The size is to be 16 pixels from a particular matrix. There are — even says "Raters were given a template in performing the evaluation." So it could certainly have been described more specifically than it's described here in the patent. Other articles that collected in our brief in footnote seven point to the same thing, and similar detailed descriptions if you want to have an ROI that leads to a

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1
     consistent result, this is how you would do it.
               NeuroGrafix's expert -- slide 18 -- was asked the
 2
     same thing. "You'd agree there are more specific ways to
 3
    prescribe how an ROI is set forth than what's in this patent."
 4
 5
               He said, "You can be more specific in prescribing
 6
    how, for a given purpose, to determine an ROI. We then talked
 7
     about the Bonekamp article from his deposition, page 170, about
     all the specifics. He said, "Does the '360 patent provide
 8
     those sort of details?
9
               Answer -- the first answer was "That's not the
10
11
    purpose of the patent."
12
               But then when asked, "Does it describe that or not,"
    he says, "No, it does not."
13
14
               I also disagree with his first answer, which is "it's
    not the purpose of the patent." In this situation, when you're
15
16
     telling people to make a mathematical claim of conspicuity
17
    based on two regions of interest, if those regions can lead to
18
     different results if created differently, you do need -- it is
19
     the purpose of it, to tell someone how to make it.
20
               Without a standard in the field, or a particular way
     described, users don't know how to do it. They're left to
21
22
     their own devices, and we know, and the evidence in this case
23
     shows, that different ROIs can lead to different intensities,
24
     ergo the calculation of conspicuity is different. First look
25
     at literature.
```

1 This is slide 20. 2 The Krak reference at 294, the method of ROI determination definition has a direct influence on quantitative 3 outcome. It is not, as NeuroGrafix suggests, irrelevant how to 4 5 come up with one because the outcome will be the same. Depending on how you choose the ROI, you'll get a 6 7 mathematically different answer. The Oxidal reference says the 8 same thing. Subjective placement of the ROIs impacts the data. 9 It's a collection of articles like that in our brief at 10 footnote eight. The experts' work in the case confirms that. 11 12 working from the same images that originated actually from 13 Dr. Filler. This is Dr. Bryan's analysis. Choosing -- if you 14 see on the right side, you'll see faint yellow lines pointing to small circles that are all in a nerve. And what those show 15 at different ROIs, there's different means signal intensity, 16 17 and that range, Your Honor, is not a percent or two difference. 18 These are not -- as the case law would say, it would need to be 19 to not be indefinite, either equivalent or substantially 20 equivalent that you get to the same result. We're looking at a range of 60 percent differences. And, here, where that leads 21 22 to a conspicuity calculation of 10 percent difference between 2.3 neural and non-neural tissue makes all the difference, as we'll 24 see. 25 Dr. Filler, in his original report, prior to Markman

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gets to the same conclusion. He measures the signal, average signal intensity in the lung, which is the non-neural tissue analysis. And those numbers range from 13 to 19. It's a 40 percent difference. Dr. Moseley, same thing, depending on how you set up your ROI, you can get dramatically different results for what that intensity is.

Now, in response, all NeuroGrafix points to is a cite to Dr. Bryan. The top of the slide is their brief, footnote ten. And what it says is, Bryan suggests the signal intensity will not change meaningfully if different sizes and shapes of selected ROIs are used. That's not what he said, nor is that the record evidence in this case, and if you look what we've put below is the actual dep testimony that they pointed to. And what Dr. Bryan says there is when asked about a hypothetical that doesn't exist in practice, which is a purely homogenous structure, meaning every pixel in that structure has the exact same signal intensity and there is no noise at all in the measurement, if you selected an ROI entirely within that hypothetical homogeneous noise-free section, well, yeah, you'd be taking an average of identical numbers. So there would be no difference, except, depending on where you place it, it could still be different.

So that quote by no means supports this broad-sweeping proposition that the signal intensity will not change meaningfully if different sizes and shapes are used.

Their own witnesses, Dr. Brant-Zawadzki and Filler, say otherwise.

In response, NeuroGrafix repeatedly says in its brief, "This method is definite and repeatable." They say -- I think we cite six on the slide, on slide 25. There might be a couple others as I remember the brief. None of those point to any evidentiary support at all. The idea that the selection of a region of interest, that the teaching this patent will show definite and repeatable -- I know why NeuroGrafix wants to say that, because that would support the idea that you don't get a different result. The fact of the matter is not does the patent teaches how to do, nor does the actual evidence show it.

And what we have on the next handful of slides is the -- are the expert disclosures that have been put in, in this case. On the left -- slide 26 -- Dr. Filler's calculation on a particular image, and he says the conspicuity in that instance is 1.4. Using ROIs that are, again, in the nerve and in the same section of non-neural tissue Dr. Filler selected, could he select two ROIs that lead to a calculation of 1.4? Sure. But you could just as well -- one of skill in the art could choose, as you see on the right side, figure six on Dr. Bryan's report, choose ROIs in the nerve, ROIs outside of the nerve, and get to numbers that are underneath 1.1.

So the core question of could two people skilled in the art, based on the open-ended teachings of this patent of

1 choose an ROI, however you see fit, lead to different 2 calculations? It's not only -- call it Filler v. Bryan, or Brant-Zawadzki -- he doesn't do any calculations -- but Filler 3 v. Bryan or Filler v. Moseley, Filler's own calculations --4 5 Dr. Filler ran calculations of the plexus versus the lung -and these are figures five, six and seven from his February 1 6 report -- Feb. 2011 report on slide 27. The same exact image, 7 8 the same exact scan, he chooses three different sets of regions 9 of interest. 10 And at first glance, these may not seem to be an 11 issue because these are all larger than 1.1. But there are 12 claims, specifically claim 19, that has a similar conspicuity, 13 no one argued it should be calculated or deemed any different, 14 and that claim says it has to have a conspicuity of five. And 15 what Dr. Filler's three analyses here confirm is that even the same person, even the inventor, when he runs these calculations 16 17 with different regions of interest, gets, in one instance, 18 conspicuity above five, meaning infringement. And in two 19 instances, gets conspicuity below five, meaning no 20 infringement. It is the same scan that he's looking at. The expert for NeuroGrafix, Dr. Brant-Zawadzki, when 21 22 shown these is asked, Well, with respect to this image, three 2.3 different ROI settings lead to one satisfying claim 19 and two 24 not. He says with respect to the same data, this is the 25 question in his deposition, line 188.

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1
               THE REPORTER:
                             Line what?
 2
               MR. LoCASCIO: 180 -- page 188, I'm sorry.
               Same data, same scan: "Depending how you measure it,
 3
     it would satisfy claim 19 or not satisfy it, depending on the
 4
 5
    ROI selection, true?
          "ANSWER: Yes."
 6
 7
               In the brief, NeuroGrafix ignores all of this test
 8
    data, all of Dr. Filler's original calculations, Dr. Bryan's
 9
     calculations, and just says the nerve was always significantly
10
    more than 1.1 times as conspicuous than the lung except one of
11
     the claims is a good example of why that alone isn't enough,
12
     because we saw in claim 19, the conspicuity calculation is
13
     different depending on the ROI, and that's the core question
14
     here. And even with respect to 1.1, Dr. Filler's
15
     calculation -- this is shown in slide 30 -- is 2.2 or 2.31;
16
     Dr. Bryan ran different ROIs on the same image and got examples
17
     under 1.1.
18
               Same thing on slide 31.
19
               Dr. Filler gets 1.4, Dr. Bryan calculates things
20
     above and things below 1.1, all depending on just where you
21
     place and how big and how -- what size is your region of
22
     interest.
23
               Yet another example, on slide 32 and on slide 33.
24
     The response to that from NeuroGrafix is these are irrelevant
25
     because Dr. Filler, their position is now Dr. Filler's original
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and only expert report to this court and to Siemens Medical Solutions was not actually attempting to do ROI calculations, consistent with the '360 patent, well that is not what his report was submitted for. His report was originally submitted to show how to calculate conspicuity to support NeuroGrafix's Markman position and how on calculate conspicuity, inherent in that requires calculating an ROI.

And so to suggest now that Dr. Filler's calculations, which confirm different ROIs lead to different results, is just a -- I think their word is it's informal, it's not a formal conspicuity analysis, it's an informal conspicuity analysis.

It's a conspicuity analysis submitted to this court for the purpose of net determining whether something has a conspicuity of 1.1.

And under that, his own selection of ROI was not, as they would suggest now, slip shod and not consistent with one of skill in the art. What it is, is it now undermines their position so they want to not have to be held to what Dr. Filler said. Even if you ignore Dr. Filler's calculations, what is clear from the literature, from both experts, on the question of regions of interest, is patent didn't tell you how to do it, and if you do it different ways, you can get to different results. Dr. Brant-Zawadzki actually says the method Filler used that NeuroGrafix now wants to distance themselves from,' is how' the '360 patent teaches it. He says the same thing,

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1
     slide 35 -- that both Dr. Bryan and Dr. Filler perform an ROI
 2
     calculation in their original reports which is the data we just
 3
     looked at, consistently with the '360 patent.
               Whereas here, there are multiple ways of determining
 4
 5
     the scope of the claim and the patent doesn't tell which way to
     do it -- this is Honeywell, Geneva Pharmaceuticals -- that is
 6
 7
     the epitome of indefiniteness because it could just as easily
     be infringing, as non-infringing, and it depends not on what
 8
 9
     the claim describes but on a subjective analysis, Your Honor,
10
     and --
11
               THE COURT: All right.
12
               MR. LoCASCIO: With that --
13
               THE COURT: You've made the point.
14
               MR. LoCASCIO: Thank you.
15
               THE COURT: Mr. Fenster.
16
               MR. FENSTER: Your Honor, this claim limitation that
17
     we're looking at, the patent does have this limitation that
18
     limits the claims to the requirement that there be a
19
     conspicuity of nerves of 1.1 relative to background tissue.
20
     It's undisputed that what that means is that it requires that
21
     the nerve be exactly at least 10% brighter than the surrounding
22
     tissue.
2.3
               THE COURT: Yes.
24
               MR. FENSTER: Now, that seems -- that looks to be a
25
     very specific requirement, but the court raised some questions,
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as did Siemens Medical Solutions, about how you calculate conspicuity, and first they asked, what formula do you use. No formula; the patent doesn't tell you.

Then he pointed the court to the formula in the patent, where it says — where it defines conspicuity as contrast, and then teaches that contrast is the ratio of SN over SM — this is in the patent at column 22, where it says, "A nerve—to—muscle contrast parameter, R, was then computed as the ratio of S sub N, divided by S sub M, for muscle, and the court found in its claim construction order that while difficult, because this is a long patent and this is one line therein, the court could construe conspicuity as this ratio. But the court asked for guidance. Well, is it subjective how we determine this, how we calculate this ratio? The court asked two questions: First, 23, please.

First, how would a person of ordinary skill in the art identify whether something is nerve or background? And then second, how would a person of skill in the art select the regions of interest and is that a subjective query?

So we showed -- and I don't think it's disputed -- and Siemens Medical Solutions hasn't raised it here -- that one of skill in the art does know how to select the nerve. And next slide, it is undisputed that the patent teaches how to select the nerve. That one can select the nerve just by gross anatomy and that the patent specifically teaches two methods

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     sufficient to identify nerve when gross anatomy is not enough,
 2
     and that is that the -- to identify presence of the fascicle
    pattern -- that is at column 27, lines four through 28,
 3
     line 26, and that also teaches additional method of the
 4
 5
     combination of diffusion weighting and fat suppression.
                                                              That
     is at column 22, lines 33 through 36.
 6
 7
               There is no real dispute, I don't believe, that at
 8
     this point, that one of skill in the art does know how to
 9
     identify a nerve, and so I will not go to what the patent
10
     teaches about how you select regions of interest.
11
               The experts, Your Honor, I don't know how you parse
12
     through when you have competing experts, and the experts are
13
     all over the place on this. So what I do know is that the
14
     expert testimony is extrinsic. What is really important is
15
     what the patent says. And what Siemens posits, and the
16
     question before the court is, does the patent tell you how to
17
     calculate the region of interest? And, Your Honor, it does.
18
               First, there are two regions of interest we have to
19
     identify: The first is the nerve. That's the numerator in the
20
     ratio. And the second is the background tissue, right?
     that's the denominator in the ratio. So, first, with respect
21
22
     to the region of interest for the nerve, the patent tells you
2.3
     how to do it.
               This is slide 26.
24
25
               It says you use a thresholding process. It says at
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column 20, lines two to seven, a thresholding process is used to identify relatively bright regions of the image potentially representative of nerve. With the boundaries of these regions established, the intensity of the pixels associated with each region is evaluated and average image intensities for the regions are computed.

Now recall, that the ratio that we — that the court found described in the patent as the contrast parameter is SN or SM, those are average intensity. This is telling you how you calculate the average intensity for the nerve. You use a thresholding process. It describes that again in slide 27 at column 30, lines 58 to 76. The system then determines the boundaries of the imaged nerve in each of the two dimensional images available using a thresholding process. The patent tells you how to do it.

What does that mean? Slide 28. So this is from Exhibit 20 to Dr. Filler's declaration, this is just to illustrate what thresholding means. So first what he did is he selected a point on the nerve — this is slide 28 — I'll do this on the Elmo, Your Honor. These are the same slides.

So this is slide 28 -- this not as good -- where he selects a point within the nerve and then he uses a segmentation algorithm. So this is built-in software. Let's go back to -- I apologize, Your Honor.

At the top right, it shows that these are

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1
     segmentation parameters, and there's an algorithm that says
 2
     threshold. I don't know if Your Honor can see that, about four
     lines down on the right side?
 3
               THE COURT: Yes, I can see it.
 4
 5
               MR. FENSTER: Thank you.
               If you go to slide 29, this is the thresholding.
 6
 7
     What you do is you set an intensity above which the image is
 8
     shown or it's highlighted and anything below the threshold is
 9
     not highlighted. If you set it up to 83, it highlights the
10
     nerve. Eighty-three is the interval that is highlighted on the
11
     right about mid level, do you see where it says 83 interval?
12
               THE COURT: Yes.
13
               MR. FENSTER: Okay. The next slide, slide 30, takes
14
             If you go up, if you do that interval of up one notch
15
     to 84, you get a lot of stuff that is clearly not nerve.
16
     That's what the thresholding process is. You use the slider to
17
     identify the nerve, and when you go too far, you get clearly --
18
     you get stuff that is clearly not nerve. So you back it down
19
     to 83 and that's how you identify the nerve.
               So the nerve is selected using the thresholding
20
21
    process and you take the average intensity of that nerve.
                                                               Next
22
     slide.
23
               That -- using that thresholding process, by the way,
24
     is -- basically it gives you the same result as Dr. Bryan did
25
     in his opening report. Next slide.
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So the patent teaches you to use the --Okay. teaches one of skill in the art to use this thresholding process for the numerator to find the average intensity of the nerve. You select the region of interest by thresholding, and you select the whole nerve, you take the average of it. That's what the patent says to do. Now, how do you determine the non-neural tissue? Two different sets of claims that -- and the language of those dictates different results. Claim 18 -next slide -- so first, claim 18 says that you need a conspicuity of the nerve that is 1.1 relative to any adjacent non-neural tissue. So here, claim 18 dictates what the non-neural tissue is. It is any adjacent non-neural tissue. In other words, you find an adjacent tissue and you select the whole thing. That is dictated by the plain claim language, and it is from Exhibit 15 to Dr. Filler's declaration, and what I've done is just illustrated this part here is the nerve, this is the adjacent non-nerve, and what he's done is just selected the non-nerve tissue and takes the average of. That's what claim 18 says to do. The other claims, claims one, three, seven, 11 and 12 -- slide 34 -- 11, don't specify which non-neural tissue. They say the non-neural tissue. Here we have to look to the specification. The specification does tell us which region of interest to use for the non-neural tissue. Slide 35. What the patent did and what it discloses, is using a

1 two centimeter elliptical region of interest. At column 27, 2 lines 29 through 43, what it says is images from the second series were post-processed by selecting manually an elliptical 3 region of interest, approximately two centimeters in diameter 4 5 around the sciatic nerve in each of the sections. The patent 6 tells us how to select the region of interest. Just as it 7 said, the contrast parameter was calculated using the ratio. 8 It says the region of interest was selected as the two 9 centimeters surrounding the nerve, and that is illustrated at 10 figure 22 of the patent. 11 So let me take you to the Elmo. So this is 12 column 27. This is what we just looked at where it says images 13 from the second series were processed by selecting an 14 elliptical region of interest approximately two centimeters in diameter. That's at line 30 on column 27. 15 16 It then goes on in the next paragraph to show is that 17 these are illustrated in the figures, and figure 22 shows an 18 axial protection of the nerve including the graft. 19 figure 22 shows this two centimeter region of interest. This 20 is figure 22 from the patent. And this image is a little hard 21 to see, so I got the original images from which this data set 22 was created. But what it shows, this is a reverse image where 2.3 the dark is the sciatic nerve and the white stuff around it is 24 the background tissue. This is a two centimeter of interest. 25 This is axial. What they did is they took a two centimeter

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1
     ellipse in cross-section and stacked those up to get the
 2
     two-centimeter cylinder that is shown on figure 22.
               Let's go to slide 37. So, Your Honor, I apologize
 3
     for the bloody image on the right. This is the original image
 4
     from which figure 22 was generated. As you can see at the top,
 5
 6
     it says University of Washington Research, this was dated
 7
     December 1st, 1992. Do you see that at the top?
 8
               THE COURT: Yes.
 9
               MR. FENSTER: So this is the original image which
10
     figure 22 was shown and you can see that side by side if we
11
     just go briefly to 46. So 46 shows on the left, the image that
12
     we're looking at, the original image, and on the right is
13
     figure 22 from the patent. Though it's not quite scale, you
14
     can see that they're the reverse image of each other. That the
15
    nerve shown in white on the left is shown in dark on the right,
16
    but that is the exact same image of the sciatic nerve that
17
     is described in the patent.
18
               Do you see that, Your Honor?
19
               THE COURT: Yes, I do.
20
               MR. FENSTER: So let's go back to 37 and look at the
21
     original image.
22
               The original image shows a -- the neurogram that was
2.3
     generated using the image and the region of interest -- the
24
     two-centimeter region of interest that was selected, that is
25
     shown in figure 22 on the left, and on the right, you see the
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2.3

operative — the surgical paragraph that was taken during surgery. And at the top, what they're doing is pointing to the sciatic nerve. This sciatic nerve was cut by a knife, and if you can look right in the middle of the image on the right, you can actually see some little black sutures where it goes from being, sort of, a nice, normal image of the sciatic nerve to an injured portion of the nerve. In the middle there are little black sutures. That's where they sewed the nerve back together.

On the left is the neurogram using the invention that was shown of that nerve. And the patent tells you and illustrates if figure 22, taking this two centimeter region of interest, those are the three components that we need to calculate conspicuity. You identify the nerve, you take the region of interest of the nerve, it's determined by thresholding, and you divide it by the region of interest of surrounding tissue and the patent says to use a two centimeter surround.

The patent discloses how to do it.

Now, let's go to 41. We originally proposed that the court construe conspicuity as the continuing arrest as it's defined in the patent where it's defined exclusively as the contrast between the nerve and any adjacent non-neural tissue as least 1.1 times. Indefiniteness — the Federal Circuit law in indefiniteness says that claims are presumed valid and that

2.3

we shouldn't invalidate a claim unless a narrowing construction cannot properly be adopted. That's in the *Microprocessor*Enhancement case on slide 20.

So what we would propose in terms of narrowing construction is the following: This is on slide 42: So we would propose the following narrowing construction consistent with the specification: Contrast, conspicuity should be defined as the contrast in, for example intensity and color, between nerve and any adjacent non-neural tissue at least 1.1 times. Then specify how to contrast is calculated as described in the patent. Contrast is calculated by dividing, one, the average signal intensity of a region of interest of nerve as determined using a thresholding process, by, two, the average signal intensity of the non-neural tissue, for claim 18, region of interest for the non-neural tissue is the brighter adjacent non-neural tissue, and for the other claims, the region of interest is the non-neural tissue. It's an approximately two centimeter ellipsoid surrounding the nerve.

That is the best guidance that we have from the patent. The patent is not perfect, Your Honor, and I wish that it said this is the only way to do it but it doesn't. But it does disclose how to do it. Just as the court struggled to find that the contrast could be calculated using the formula, the ratio, we ask you to find that the court — that the regions of interest are specified. It does tell the reader

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     that they used threshold, and they used the two centimeter
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     region of interest for the non-neural tissue.
               Unless you have any questions, Your Honor?
 3
               THE COURT: No.
 4
 5
               Please.
               MR. LoCASCIO: Your Honor, pardon the expression, but
 6
 7
     this question of regions of interest is in some ways from
     defendant's perspective, whether it's herding cats or whack a
 8
 9
    mole or whatever you want to call it, this proposed
10
     construction from NeuroGrafix never existed and they did not
11
     take the position that the patent specified how to calculate
     regions of interest in this manner until their opposition brief
12
13
     via attorney argument and a belated submission from Dr. Filler.
14
     The process in this case was we had a whole Markman hearing and
     we identified this.
15
16
               THE COURT: I know.
17
               MR. LoCASCIO: We had an expert process.
18
     Dr. Brant-Zawadzki, NeuroGrafix's expert, does not say any of
19
     the things that Mr. Fenster just walked through. He doesn't
20
     say it needs to be done by thresholding. He never even
    mentions the two-centimeter portion of the specification.
21
22
     want to walk through what the specification actually shows to
2.3
     respond to Mr. Fenster. Even now, this position continues to
24
     evolve and change.
25
               Our Exhibit 15 -- if we're incorrect about this, I'm
```

```
1
     sure Mr. Weiss will point it out -- to the Filler declaration I
 2
    have is not the alleged Exhibit 15 that Mr. Fenster just put on
     the screen. This color document, this slide, slide 37, that
 3
    Mr. Fenster showed, put it on the Elmo -- was never produced,
 4
 5
    has never been turned over in discovery, it's not even in the
 6
     late Filler submission. The first time we saw it was this
 7
    morning, with these decks, and, let's step back, it frankly
 8
    doesn't tell anyone who is reading this patent anything since
 9
     it's not in the patent. It doesn't even have the two
10
     centimeters on it on the right side.
11
               But this concept of the evolving and moving
12
     interpretation of how to construe conspicuity, how to determine
     the region of interest, is an effort in the face of -- as
13
    Mr. Fenster puts it, a patent they don't like the way it's
14
15
     written. That is how the patent is written. We have to
16
     construe it based on the actual patent and on its specification
17
     and file history. None of that supports what we're now hearing
18
     on opposition to this conspicuity motion from NeuroGrafix.
19
     actual patent says, for instance, column 14 --
20
               THE COURT: Wait a minute.
21
               MR. LoCASCIO: -- line 53 to 62 --
22
               THE COURT: Wait a second.
2.3
               MR. LoCASCIO:
                              Sure, Your Honor.
24
               THE COURT: What line are you on?
25
               MR. LoCASCIO: I am in column 14, line 53, Your
```

```
1
     Honor.
             If it helps, I'll put it up on the screen.
 2
               THE COURT: No. Go on.
               MR. LoCASCIO: Okay. It says one or more regions of
 3
     interest within an image can be identified. Each ROI may be a
 4
 5
     single pixel or voxel or larger region. It can be done
    manually; it can be done automatically. Mr. Fenster and
 6
 7
     NeuroGrafix's position is the determination of an ROI for the
 8
    nerve is different than it is for the non-neural tissue. And
 9
     for the nerve, it need be automatic via a thresholding process.
10
     First of all, that is inconsistent with the language of the
11
     specification, column 14.
12
               It even then says after you do one of these methods,
13
     what I've highlighted in line 63 and 64, next you calculate the
14
     average image or pixel intensity within that ROI.
    Mr. Fenster pointed out, if this is how you get conspicuity:
15
16
     Calculate this average of intensity from the ROI. It's right
17
    here in column 14, which as the specification gets to that
18
    point, this is in the section if you go back to one page, to
19
     column 11, this is all within the heading of neurography
20
     system. "Neurography" being the term plaintiff used to
21
     identify nerves in MRI image.
22
               In that process, this is how you can calculate an
23
           Doesn't say have to, it gives you full latitude to do so.
24
    What NeuroGrafix points to -- and I note -- points to now for
25
     the first time is that we ought to look at column 27, 28 on
```

1 this issue -- columns 27 and 28 contain both the two centimeter 2 reference NeuroGrafix points to and this thresholding concept. And the intro to that section is the fascicle identification 3 and nerve enhancement. And so they're talking about in a 4 5 specific process of identifying fascicles which is what all of 6 this points to, and actually figure 22 that Mr. Fenster shows 7 is preceded by two other figures showing a cross-section of 8 that nerve, identifying fascicles, these are figures 20 and 21. 9 Twenty showing in the middle there, that same sciatic nerve, 10 calling them white dots inside of a larger white circle, zoomed 11 in, in figure 21. 12 Sure, one way of doing it for fascicular 13 identification is described as thresholding. We'll get to it 14 in a second. It doesn't tell you how you go about that, any of 15 those settings Mr. Fenster puts on the screen, none of those 16 are in the patent at all. But to suggest that this passage 17 is -- now governs region of interest calculations across the 18 whole patent would read out the very language in column 14 on 19 how to use a neurography system, namely, select an ROI, in a 20 host of ways. So coming back to defendant slide deck, both expert 21 22 reports, both experts point that what language column 14 says, 2.3 this is what the patent describes. In the face of that, 24 NeuroGrafix now points thresholding, and the two centimeters 25 they do so through attorney argument because the only

2.3

alternative to that would be to say that the Filler declaration they put in with their opposition is expert testimony, which is a bit of a catch-22 for them because they don't want to say that because then they would be frontally violating the scheduling order and the disclosure obligations they have. So instead they now had to back up to the position of it's not even evidence what is in the Filler declaration.

In their opposition to the motion to strike, they say it's neither expert testimony nor even fact evidence that the court can rely on. It is purely demonstrative. Well, then all it is demonstrative of is attorney argument to try to avoid what their own expert testimony is, Your Honor. This is a — the fourth or fifth definition NeuroGrafix has put forth for how to calculate the ROI, and it is, in my view, Your Honor, the last-ditch effort to find a way around the actual language of the patent.

The patent doesn't tell you how to do it and they have to acknowledge because their own calculations show it that if you do it different ways, you get to a different result.

This Filler submission, Your Honor, as we've talked about, it's after the expert deadline, there's no ability to really respond or depose Dr. Filler on it, but they argue this thresholding process is somehow used to draw ROIs for conspicuity. Indeed, they say it has to be the way to do it. And contrary to his report and their brief, Dr. Filler himself, before we knew this

was going to be his story, either sheer happenstance or I am incredibly prescient, Your Honor, when we deposed Dr. Filler six months or, though I don't have the date on here, he was asked about this language and how you calculate conspicuity, and he said, This fascicle identification approach is not what we're calling conspicuity. This is from page 123 in the deposition.

THE COURT: I've read it.

MR. LoCASCIO: Dr. Filler himself, when he was actually deposed, when he put in an actual expert report, said, This is not the way to do it.

Their expert then comes in, in the wake of that, and says it does not describe a way to do it. Even if you were to say, okay, despite all of that, thresholding is now going to be the way the patent describes it, Dr. Bryan, and even Brant-Zawadzki, admit in their deposition, this description of thresholding — this is slide 41 — is so vague as to be useless. It doesn't tell you — all of the settings, when you look at that screen shot Dr. Filler submitted with the opposition brief in a minute — that determines the results of your thresholding. It's not however you do it, you get to that result. Dr. Bryan and Brant-Zawadzki say it doesn't tell you how to threshold the image, and so that's great. You can use one automatic method being called thresholding, but it doesn't get you there.

1 Dr. Bryan showed -- and these are materials we 2 submitted in his timely expert reports, what you see in the left is the overall image, and what thresholding basically is, 3 is if you think about, if you have a contrast dial, which is 4 5 now a button --6 THE COURT: I know. 7 MR. LoCASCIO: -- on your TV, if you turn it down 8 enough, it goes black. If you turn it all the way up, the TV 9 goes white, and somewhere in between certain pixels lit up, 10 depending how bright they are vis-a-vis the rest of the image. 11 And thresholding just says we're going to cut it off at a point. And what showed on the right side is a 60% threshold. 12 So we will take the 60% brightest images or brighter pixels on 13 14 that image. And what it shows is you can't see any -- not 15 many, very few to no, non-neural tissue -- pardon me, neural 16 tissue. What you see there is bone and other things show up 17 from the thresholding. So just the concept of putting a 18 threshold in on the images at issue doesn't automatically make 19 the nerves just pop out; you have to do a lot more than that, 20 and there's no description of how to do it. Dr. Bryan was asked, Could I use the thresholding to select the bright areas 21 22 of nerves? That answer to that question is no. 23 So what Dr. Filler submits is his report doesn't 24 simply use thresholding. It's a specific segmentation 25 algorithm using this Osirix software -- this will not be a

1 surprise, none of this is anywhere in the specification or the 2 patent. It doesn't say -- the patent doesn't say use this what's called region growing algorithm, it doesn't say how to 3 do the threshold, it doesn't tell you any of these settings he 4 5 particularly applies. Is this a way one could not do it? Sure. It's not 6 7 "the" way the patent describes. The patent says nothing about 8 this other than use automatic thresholding unless, of course, 9 you want to use pixel, voxel, or manual settings. 10 THE COURT: I have the point. 11 MR. LoCASCIO: These choices, Your Honor -- the last 12 point I want to address is the two-centimeter issue. 13 point to column 27 and the two centimeter ellipse. They say 14 that that should be the way you construe ROI calculations for conspicuity for non-neural tissue. It's a matter of first 15 16 principles: The idea that the patent where it talks about 17 conspicuity is suggesting -- as Mr. Fenster must now fall back 18 to -- to use different methods to measure and determine the ROI 19 for neural versus non-neural -- claim 18 versus the other 20 claims -- is not how you ought to construe these claims, it 21 doesn't make sense.

But even their own language, claim 27 talking about the sciatic nerve says this region of interest, two centimeter, this is column 27, slide 45, was selected to exclude blood vessels. Blood vessels are non-neural tissue. So the two

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1
     centimeters discussed here in the actual language of the
 2
     specification is designed to exclude the non-neural tissue
     because the sciatic nerve, coincidentally enough, has a
 3
     diameter of approximately two centimeters. So they were
 4
 5
     actually choosing neural tissue with that two centimeters, not
 6
     non-neural tissue.
 7
               Dr. Bryan talked about this. Top of slide 46.
 8
     There's no specific diameter disclosed as to how to do this
 9
     throughout the patent, and specifically until the Filler
10
     submission comes in and the opposition brief, NeuroGrafix's own
11
     expert, Dr. Brant-Zawadzki said, quote, "With respect to how to
12
     select a region of interest in the '360 patent, does the patent
13
     describe a particular size or shape region to use?
14
               Answer, No, it is exactly the opposite of what
15
     NeuroGrafix now argues.
16
               And they point to slide 47 -- this is actually the
17
     image that was Exhibit 15 to the Filler report that we got.
18
     The bottom right of this image, not what Mr. Fenster showed.
19
     It has that red circle, which is allegedly that two centimeter
20
     region of interest.
21
               THE COURT: Yes.
22
               MR. LoCASCIO: Dr. Filler himself sort of cuts pieces
23
     out of it. He manually excludes some portion, he allows the
24
     algorithm to draw, what I assume, is around the green section.
25
     This is all in Dr. Filler's late submission.
                                                   This is
```

1 quintessential expert testimony. This not a demonstrative. 2 This is their opinion to support -- the only thing they use to support this two centimeter distinction. Putting aside that it 3 wasn't disclosed or adequately tested because it couldn't be 4 5 because of the way they approached it. Inconsistent with their own expert, Dr. Brant-Zawadzki, but it also adds things that 6 7 aren't in the specification. It's, again, a subjective way 8 Dr. Filler chooses to select the ROI. That's not disclosed. 9 All of these are steps he had to come up with himself that are 10 not set forth in the patent. And the last slide I have under the S.O.I.TEC Silicon 11 12 case, this concept of adding techniques that do not appear in 13 the patents cannot be used to satisfy the claim, Your Honor. 14 You can't read things in that aren't disclosed there to get 15 around the indefiniteness problem. 16 And so where we end on this issue is conspicuity 17 requires a region of interest. These claims didn't tell you 18 how to do it, and the patent itself says you can use any method 19 you want in a basket of them. And all the experts who 20 submitted expert disclosures in this case say you can use 21 different methods. Those methods lead to different 22 calculations, and mathematics itself, and indeed the experts 2.3 admit that doing it via different calculations gets you to a 24 different result. And in the face of that, the claims are 25 indefinite, Your Honor.

```
1
               THE COURT: All right. Now, do you want to say
 2
     something else?
               MR. FENSTER: Briefly, Your Honor.
 3
               First, Your Honor, Mr. LoCascio's --
 4
 5
               THE COURT: Where are you now?
 6
               MR. FENSTER: Column 14 of the patent.
 7
               THE COURT: Yes.
 8
               MR. FENSTER: And Mr. LoCascio suggested that the
 9
     thresholding, the method of selecting the ROI is somehow
10
     inconsistent with column 14. It is not. Column 14 says that
11
     the region of interest may be a single pixel or many, and it
12
     may be automatically or manually selected. That is entirely
     consistent. When you do the thresholding process to select the
13
14
     entire region, the entire nerve, it may be as small as a voxel
15
     or it may be many; and you can do that thresholding process
16
    manually or automatically, and you can do the two-centimeter
17
     surround automatically or manually.
18
               What the patent describes later as how it did the
19
     calculation and how it selected the regions of interest is not
20
     inconsistent with column 14. Second, what Mr. LoCascio showed
21
     you with respect to Dr. Bryan's thresholding process of the
22
     60% -- do you recall that image?
2.3
               THE COURT: Yes, I do.
24
               MR. FENSTER: And his analogy of the television
25
     contrast --
```

1 THE COURT: I do. 2 MR. FENSTER: -- that is just not how thresholding is done. You don't pick a random threshold and say let's see 3 what happens. You use a slider, and you adjust it until you 4 5 get the nerve, which you can identify through gross anatomy, and when it goes above that and selects things that are clearly 6 7 not nerve, which you know through gross anatomy, that's how you use the thresholding process to identify the region of 8 9 That's what the patent describes. interest. 10 Dr. Bryan is playing games with Your Honor. Your 11 Honor, in the real world, the conspicuity is much greater than 12 1.1. When the conspicuity of the nerves generated using this method are much brighter -- and it's obvious just by the naked 13 eye to see that the nerves are brighter than the background --14 15 then there's no question that that conspicuity element is met. 16 This is only -- their argument is only focused at the very 17 fringe argument -- which we don't even know if it exists in the 18 real world -- where the conspicuity is right around 1.1. 19 it's obvious -- as it will be in most cases -- that the 20 conspicuity is so much greater than 1.1, just by looking at it, the method of calculation is irrelevant. 21 22 Your Honor, we don't know whether this is an academic 23 question right now or if this is a real question, whether this 24 patent does reasonably apprise one of skill in the art, what 25 the bounds of the claim are in a real-world context, and, Your

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1
     Honor, I submit to you that --
 2
               THE COURT: Say that once more.
               MR. FENSTER: Yes.
 3
               Your Honor, this is an important point. If you --
 4
 5
     the overwhelming majority of neurography studies, if done
     right, have a conspicuity that is far above 1.1. It's not even
 6
 7
     close. You know by looking at it you don't have to do a
 8
     calculation, you know by looking at it that it's much more than
 9
     10%. You only have to do the calculation if it's right at the
10
     borderline, if it's right near 1.1.
               Well, if it's right at 1.1, you haven't done a good
11
12
     image. You haven't done it right. And, Your Honor, if you
13
     allow us to proceed to discovery and we get to even a
14
     representative sample of accused neurography studies, I submit
15
     to you that what the evidence will show is that the
16
     overwhelming majority you can -- there's no dispute, no way you
17
     could possibly calculate it, wouldn't show that the 1.1
18
     conspicuity element is met. We don't know until we get a
19
     representative sample of accused studies whether this is
20
     something that we're talking about on the fringe or whether
21
     this is a real problem.
22
               The patent law does not require absolute specificity.
2.3
     What it requires is that the claims reasonably apprise one of
24
     skill in the art, whether or not they're practicing the claim.
25
     Your Honor, by analogy, if I were to draw a line on a piece of
```

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1
    paper, this piece of paper shows a definite line, and that's
 2
    what the claims have to do. But if I zoomed in on with a
    microscope, this line would look like a mountain, and you'd say
 3
     I have no idea where this line actually is, what the boundaries
 4
 5
     of this are. And, Your Honor, I submit to you that that is
     what is happening here. We're focused in so close to the
 6
 7
     borderline that these cases don't exist in the real world.
 8
               THE COURT: Let's go on.
 9
               Please.
10
               MR. FENSTER: All right, Your Honor.
11
               MR. LoCASCIO: Your Honor, if I may, before we move
12
     on, I have one thing I want to show that we didn't have a
13
     chance to talk about responding directly to what Mr. Fenster
14
     just said.
               At the end of the day, this 1.1 calculation is the
15
16
    basis -- the point of novelty. It's how this claim was issued.
17
               THE COURT: Well, I'm looking at what the examiner
18
     said.
19
               MR. LoCASCIO: Specifically --
20
               THE COURT: -- so I can derive that on my own.
               MR. LoCASCIO: You don't need me to explain that, to
21
22
    be sure.
23
               THE COURT:
                          No.
24
               MR. LoCASCIO: What I want to direct your attention
25
     to is this is not a hypothetical exercise. The plaintiffs
```

```
1
     themselves -- NeuroGrafix said on the right side on this screen
 2
     I've got, see, it says it's undisputed that the images in
    Exhibit A to Dr. Filler's rebuttal report -- this is his expert
 3
     report from the first round of Markman -- were made using the
 4
 5
    method disclosed in the claim by the '360 patent. So using the
    method that's disclosed in this patent, Dr. Filler made images.
 6
 7
     This isn't some hypothetical line exercise. This is --
 8
               THE COURT: That's all right. You don't have to say
9
     that.
10
               MR. LoCASCIO: The image that Dr. Filler submitted
11
    had a conspicuity -- this is on slide 26 -- of 1.4. It's not
12
     10, it's not 100, it's not so far away from 1.1. That same
     image, if you chose your ROI, as one of skill in the art can,
13
14
     if you look at the two images, Dr. Filler's in the green boxes,
15
     you can see his selection of the square -- with the light blue
16
     one -- if you can distinguish the difference -- it's different
17
     for me to -- is the nerve. The green circle to the left of
18
     that is the non-neural tissue, and he gets 1.4.
19
               THE COURT: Stop. Now, let's go on.
20
               MR. LoCASCIO: Okay. The last issue, Your Honor, I
21
    believe is the summary judgment.
22
               THE COURT: Yes.
23
               MR. LoCASCIO: Okay. Let me walk through that.
24
     Specifically, there are -- probably the easiest way to think of
25
     it is three bases. The point of this was, Your Honor, to
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```
1
     address things from Your Honor's claim construction to narrow
 2
     issues in this case. And, first, this is the slide deck called
     "anticipation." I don't -- we've got three different issues,
 3
     the first of which is pronounced -- as I've been told by
 4
 5
     various obvious people who work in this industry -- Hajnal --
     H-a-j-n-a-l. The Hajnal reference, it is agreed, teaches every
 6
 7
     single thing in claim three. The only debate being how to deal
 8
     with the language of claim 3(d), 3(d)(iii) as it's been
 9
     described.
10
               They -- NeuroGrafix has previously explained that
11
     this means applying a pulse sequence. That's what step (d) is,
     applying a pulse sequence to the patient through the MRI
12
13
    machine and getting a result. What it does is talk about T2
14
     weighting, namely, having an echo time and repetition time that
     are different enough, Your Honor, that that generates a
15
16
    particular response image. And the point of that, the way it's
17
     written is to exploit this characteristic inherent in nerves.
18
    And so the parties, Your Honor, took that definition, they
     looked at what the claim said, and during the course of claim
19
20
     construction, came to an agreement that what this meant is T2
21
     weighting.
22
               During the Markman hearing -- slide seven --
2.3
    NeuroGrafix said claim three is long T2 waiting. During the
24
    hearing, Mr. Fenster said the same thing: This claim relates
25
     to long T2 waiting. The agreed-upon construction of this
```

phrase, is shown on the right, a combination of echo time and repetition time designed to take advantage of the differences in T2 values of the nerve compared to surrounding tissue. This is commonly referred to as a T2 weighted sequence. *Hajnal* discloses and uses a T2 sequence. It's not disputed that it does.

And so the only basis for noninfringement is that the claim requires something more than a T2 weighted sequence, which is inconsistent with how the parties agreed this would be construed. Claims four and five depend from claim three and specifically apply echo time limitations or repetition time limitations, TE and TR, to the broader language of T2 weighting in claim three. They confirm that what claim three talks about is using T2 weighting with something of this ratio.

NeuroGrafix admits that *Hajnal* discloses those particular ranges, so claims four and five are disclosed by *Hajnal*. The only difference for those, like three, is their new proposed claim construction of that term.

This idea that -- obviously, if it meets the dependent, it must meet the independent, I don't need to spend the court's time.

The opposition brief from NeuroGrafix never acknowledges or mentions the parties had agreed on what this term meant. Their expert, when he submitted his report on this issue, was never told or informed that this is what it meant.

2.3

They argue now that we should apply a new term or a new limitation to claim three to avoid the *Hajnal* reference. That new construction is incorrect. They argue that despite the agreement, this element requires the user to check when running a scan the actual T2 times of all of the non-neural tissue in that particular image as the neural tissue.

This is not met -- and then they argue that this is not met in <code>Hajnal</code>, figure five, and the basis for that argument, Your Honor, is just a recycled version of the nerve argument that we had as to does the nerve -- is it limited, Your Honor, to areas outside of the -- I think the term was the arachnoid space when we had this discussion originally or not. And this argument was never raised, and this court's -- here and the Northern District under the rules we all agreed to follow say you cannot on the purpose of summary judgment ignore the stipulated construction because then we would just have parties at summary judgment shifting their positions around so they can avoid summary judgment.

The whole point of what has been a, I think, helpful, thorough -- we're going to get to -- there are claims that obviously are not part of this summary judgment motion, there are claims not part of the indefiniteness argument. To get to the heart of what this case is really about, we have had a process in place, and that process -- I think all sides would agree -- has been valuable. What the -- but that process has

1 teeth, and when you agree to the construction, you can't later 2 on change it to avoid summary judgment. Now, they argue it's not meant because the image has 3 shorter T2 times for the non-neural tissue than the nerve. 4 5 That ignores claim six because claim six depends from four, which depends from three, and says the non-neural tissue 6 7 includes fat, and fat has a longer T2 constant than nerve. 8 Their position is, Well, it doesn't always, and depends on how 9 you take the image. But the fact of the matter is there are 10 references and places you can point to where fat -- this is the 11 whole point of fat suppression, because that's a different 12 technique to -- for lack of a better term -- to knock the fat 13 out of the image so you see the nerve more clearly. Fat having 14 a higher T2 time means claim six, if you -- you cannot 15 interpret claim three the way they suggest, but you can 16 interpret it the way they agreed to, because if you take it now 17 their new construction, then claim six doesn't make any sense, 18 and that is an improper way of construing a claim, to have the 19 dependent claim -- use a term -- inconsistently or be outside 20 of the dependent claim. They also argue that, Well, we're not looking at, and 21 22

They also argue that, Well, we're not looking at, and Hajnal doesn't really apply because it's somehow inside the brain or the arachnoid space. The reason we filed this motion, Your Honor, is because their only argument before this opposition as to why Hajnal didn't anticipate is the Hajnal

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reference, figure five, shows that trigeminal nerve, which is cranial nerve five, inside the arachnoid space, and their argument was, Well, that doesn't count because our claim is somehow limited when we use the term "nerve." The court rejected that argument. The court says, You elected to include in your nerve description, cranial nerves. They could have said "peripheral" or "autonomous only," but they include cranial nerves three through 12. All of these nerves have a portion inside the arachnoid space. court's construction, which they do not dispute, they have not sought reconsideration on it, means that all pieces of that nerve, including the pieces inside the arachnoid space, are subject to the claim scope. By doing so, if a prior art reference, like Hajnal, shows that piece of that nerve -- which there's no dispute. This is trigeminal nerve -- cranial nerve five, the trigeminal nerve. It's one of the nerves that's covered by the claim, and they admitted to the Patent Office -- also why we thought this motion would clean up the claims that need not be in this case anymore -- NeuroGrafix themselves admitted it

claim, and they admitted to the Patent Office -- also why we thought this motion would clean up the claims that need not be in this case anymore -- NeuroGrafix themselves admitted it shows 1.1 conspicuity. Their argument now is where it shows 1.1 conspicuity, despite being a cranial nerve three through 12, renders it outside because of this arachnoid space. That argument has been rejected. That is the basis for Dr. Brant-Zawadzki's -- their expert's argument they don't

2.3

infringe -- pardon me -- that it's not anticipated. He says it's construed to not count nerves that start in the arachnoid space. He was asked, Well, are you aware that that issue was construed by the court?

His interpretation is only look at the nerve outside of the subarachnoid space. That is inconsistent with the court's claim construction. He was never informed of that, that's unfortunate, but that means his opinions on the issue under Liquid Dynamics, Chicago Mercantile, basic common sense would say, Well, if he is opining on something other than the law the court has applied, namely, the claim construction, his opinions are irrelevant and should not be considered. By construing or analyzing the wrong construction, his opinions need to be disregarded.

Even under NeuroGrafix's new proposed construction, Hajnal shows tissues such as bone. Those also have shorter T2 constants than their nerve. So the idea that you have to dive down into the prior art and into every image and analyze the T2 times of every single piece of flesh in there is not what the claim requires, it's not what the parties agreed, but even if you did that, the Hajnal reference would still anticipate.

So lastly, just to look at this claim language, claim three, Your Honor, which is in column 37, parties agreed what the language meant, and the new interpretation also just doesn't make sense. Their new interpretation is --

1 highlighter -- it is to select in combination of echo and 2 repetition time. That exploits a characteristic, spin-spin relaxation coefficient of peripheral nerves, cranial nerves 3 three through 12, and --4 5 THE REPORTER: Counsel, please use the microphone. 6 MR. LoCASCIO: Sorry. Wherein said spin-spin 7 relaxation coefficient is substantially longer than that of the 8 surrounding tissue. 9 And what NeuroGrafix does in their brief is they use 10 ellipses and brackets to change "exploits a" characteristic 11 spin-spin relaxation coefficient, into the word "the." 12 make a limitation that says "the spin-spin relaxation 13 coefficient." They then say this language, "Of peripheral 14 nerves or autonomic nerves" -- which is plural, it is the 15 characteristic that those nerves have -- they changed that to be "the nerve," meaning the nerve being imaged. That is not 16 17 what the claim language says, and what they're trying to do is 18 take this generic T2 weighting, which the parties agreed it 19 meant originally, and turn it into something else, saying you 20 have to look at the relaxation coefficient of the nerve being 21 imaged. 22 That's not what this language actually says, and when 23 they talk about it in their brief, they change the words around 24 to be a new limitation called "the" characteristic relaxation 25 coefficient "of" the nerve. It's not what it says; that

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1
     limitation doesn't exist in this provision of claim three, and
 2
     the parties knew that when we agreed to what this language
    meant, and now NeuroGrafix, to avoid summary judgment, should
 3
     not be able to change its tune.
 4
 5
               With respect to the other claims, Your Honor, the
    means-plus-function claims, there's no dispute.
 6
                                                      They don't
 7
     agree ultimately with Your Honor's claim construction. They're
     not contesting it here; they've reserved their right, I
 8
 9
     believe, for appeal. But for summary judgment on the
10
     indefinite means-plus-function claims, NeuroGrafix agrees
11
     summary judgment is proper. With respect to the
12
     step-plus-function claims, the only argument to avoid summary
     judgment on those is the reconsideration issue we've already
13
14
     arqued.
15
               THE COURT: All right.
16
               Please, Mr. Fenster.
17
               What are we looking at?
18
               MR. FENSTER: Your Honor, this is at column 23, the
19
     bottom of 23, and the top of 24.
20
               Your Honor, the patent recognized for the first time
     that the T2 relaxation time of nerve is substantially longer
21
22
     than that of muscle. This was new. Prior to that, based on
2.3
     Dr. Moseley's work and others --
24
               THE COURT: Where are we on --
25
               MR. FENSTER: Describing it first. I haven't quoted
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1 yet, Your Honor. 2 THE COURT: Right. So what this says is that the use of TE 3 MR. FENSTER: processing had previously been considered unfeasible, meaning 4 5 it was previously thought that it was unfeasible to distinguish 6 nerve from muscle using TE time -- TE processing, as described 7 in Moseley. 8 Surprisingly -- it goes on at the top of column 24 --9 "Surprisingly, however, measurements have been conducted 10 indicating that the T2 of muscle is approximately 27 milliseconds, while the T2 of peripheral nerve is approximately 11 12 55 milliseconds, providing a factor of two difference between 13 the two types of tissue. This was a key revelation in the '360 14 patent, that the T2 of nerve is substantially longer than the T2 of muscle. Claim three is limited to those situations where 15 the nerve has a longer T2 than the tissue that surrounds it. 16 17 Your Honor, the limitation claim, 3(d), is shown on 18 the screen. This is in slide 11. 19 Claim three is explicitly limited to the situation at the bottom wherein said spin-spin relaxation coefficient is 20 substantially longer than that of other surrounding tissue. 21 22 This requires that the T2 of nerve be substantially longer than 2.3 the surrounding tissue. Claim three is limited to that 24 particular situation to take advantage of this particular 25 revelation in the '360 patent. It is expressly so limited. Ιt

is undisputed, Your Honor, that the *Hajnal* reference does not meet that limitation.

In Hajnal the nerve is surrounded by gray matter and cerebral spinal fluid. And on page 12, we have the T2 times for gray matter, cerebral spinal fluid and white matter, which is the nerve. Gray matter, which is the surrounding tissue, is 59.8; cerebral spinal fluid, which is the other surrounding tissue, is 166; and the nerve, the cerebral white matter, is 56.8. It is not substantially longer than, and it is undisputed that, the T2 of nerve is not substantially longer than the surrounding tissue in Hajnal.

Slide 13.

2.3

This is showing the relevant times -- T2 times, as applied to the *Hajnal* reference. The nerve is 56.8, and the cerebral spinal fluid and gray matter, the background, are both longer than the nerve T2 time. So the spin-spin coefficient of nerve -- it is undisputed that the spin-spin coefficient refers to the T2 time -- is longer than -- is not longer than that of the surrounding tissue in the *Hajnal* reference. It does not meet that "wherein" language.

So the next slide, slide 14, the claim requires that the T2 of nerve be substantially longer than the T2 of surrounding, but that limitation is not met in *Hajnal*. In *Hajnal*, the T2 of the surrounding is actually longer than that of nerve. That limitation is simply not met by the explicit,

clear, express language in the patent.

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We're not interpreting anything. We're not asking for any kind of construction. We're asking the court to apply the plain language of the claim, which requires that the spin-spin coefficient of nerve be substantially longer than that of the surrounding tissue. That limitation is not met, and undisputedly so, by <code>Hajnal</code>.

Now, the way Siemens argued this, frankly, Your Honor, is litigation by ambush, and I don't say that lightly. But, Your Honor, what they referred to is a "gotcha" argument based on a stipulation, an agreed construction. So this is at slide 15. The agreed construction is that the combination of echo time and repetition time that exploits the characteristic spin-spin, that is T2 weighting. I agree with that. what we agreed to at the time. We did not agree to waive the requirement that the T2 time of nerve be longer than that of the surrounding tissue. We just agreed that this language means that the process of selecting time -- echo time and repetition time to exploit that characteristic is how you'd -is T2 weighting, and that is how you determine whether or not the T2 of nerve is longer than that of surrounding tissue.

Now, this stipulation was not even mentioned in Siemens' opening brief. We never were put on notice that they were somehow reading that our agreed construction somehow waived this limitation. It was never flagged until

2.3

Mr. LoCascio pulled it out at an "ah-ha" moment, as a "gotcha" moment, during the deposition of Dr. Brant-Zawadzki. That is the first time I learned, and that was after our opposition, and that is why we had to ask for the permission to file the surreply.

That is the first time I learned that their basis for saying that this 3(d)(e) element -- or 3(d)(iii) element was raised -- was met because of our agreement. That is the first time. And, Your Honor, this was not flagged in the opening brief, and if they thought that we waived or changed the clear language of the claim based on a stipulation, it should have been spelled out so we could have addressed it in the opposition because that is absolutely not what we agreed to.

The plain language of the claim requires that the spin-spin characteristic of nerve be longer than that of surrounding tissue. That element is not met by <code>Hajnal</code>. If the court somehow thinks that we waived this by this agreement, that is absolutely not what NeuroGrafix and the plaintiffs intended by this agreement. We meant to resolve, in good faith, the disputes, and this was language that we thought we could agree to that the -- what this was referring to is T2 weighting to exploit the T2 characteristic. And that's how you determine whether or not that "wherein" limitation is met.

Now, Mr. LoCascio raised the point that we somehow didn't challenge the claim construction because we didn't seek

1 a motion for reconsideration. Just to protect the record, 2 obviously we maintain that where the court ruled against the plaintiffs that the nerve wasn't limited to outside the 3 arachnoid space, we maintain our position that that was -- that 4 5 our position on that was correct. I respect the court's 6 decision on it, and we'll take that up on appeal, if necessary, 7 later. But we're -- I hope the court understands that we're 8 not waiving that because we didn't seek a motion for 9 reconsideration of that. 10 The argument -- Mr. LoCascio, who I generally believe 11 has a really excellent understanding of patent law -- made a 12 statement about dependent versus independent claims that I 13 think is just not right in this particular circumstance. 14 is defendant's slide 13, and defendants are making the argument 15 that because Hajnal meets the limitations in dependent claims 16 four and five, it must necessarily meet the broader claim 17 (d)(iii), and that is -- that's just not -- that's not an 18 accurate statement of the law, and it's not logical. 19 because you meet a narrowing limitation of three and four does 20 not mean you infringe the independent claim or that the prior art teaches the independent claim. 21 22 You can teach -- Hajnal may meet the limitations of 2.3 four and five, but if it doesn't meet the underlying 24 independent claim, it doesn't anticipate any of them. And what 25 we've shown clearly is that the express language of claim three

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     is not met; therefore, the fact that Hajnal does meet the
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     specific limitations in four and five is irrelevant.
                                                           There is
     no anticipation of claims three, four and five unless they show
 3
     anticipation of three first, and this limitation of three is
 4
 5
     not met, and I don't think that this argument that because four
 6
     and five are met, three must, therefore, be met follows.
 7
     think that is contrary to law.
 8
               THE COURT: Is that it?
 9
               MR. FENSTER: Yes, Your Honor.
10
               MR. LoCASCIO: If I might briefly, Your Honor, I
11
     actually think Mr. Fenster and I agree. I think this is a core
12
     enough premise that we both agree with the concept that if you
     infringe an independent -- pardon me -- if you infringe a
13
14
     dependent claim, you, as a matter of fact, infringe the
15
     original -- if you infringe a dependent claim, you must
16
     infringe the independent claim it depends from. If we disagree
17
     about that, we can disagree, and I'm fairly confident that that
18
     is the law.
19
               THE COURT: Is that what you said?
20
               MR. FENSTER: Your Honor, I said that in order to
     infringe for infringement, of course, you must -- in order to
21
22
     infringe claim four, you must infringe claim three.
2.3
    Mr. LoCascio's point, I think, is that if you meet the
24
     limitation of four, then you necessarily meet the limitation of
25
     three, as well. That is the part that I disagree with.
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1
               MR. LoCASCIO: I don't see the difference in those
 2
     two things. If you meet the limitations of four, you infringe
     claim four.
 3
               THE COURT: I don't know exactly what we just did.
 4
 5
               MR. LoCASCIO: I think where the difference is, if I
 6
    might --
 7
               THE COURT: And if a court just goes along with
 8
     something the court doesn't understand in a patent case, the
 9
     court is making a bad mistake, and I didn't understand that
10
    point.
11
               MR. LoCASCIO: If I might state my position that
12
    Mr. Fenster started with, I think this will clear this all up
13
     before I get to the points I want to make, and the first is
14
     claim four and five have additional limitations that are --
15
               THE COURT: I understood that.
16
               MR. LoCASCIO: -- that are acknowledged to be in
17
              So the entire analysis of all three claims -- I think
18
    Mr. Fenster and I can agree -- it comes down to this limitation
19
    Mr. Fenster believes is in claim three that we believe is not.
    And my view is if claim three has a limitation not found in
20
21
     Hajnal, then four and five would not be invalid, just like
22
     claim three would not be invalid --
2.3
               THE COURT: That's what he said.
24
               MR. FENSTER: We agree on that.
25
               MR. LoCASCIO: I thought I brokered a solution.
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1
     don't know that I have.
 2
               MR. FENSTER: I believe, Your Honor, Mr. LoCascio's
    point -- and Mr. LoCascio can correct me if I'm wrong -- this
 3
     is claim four, Your Honor. Claim four narrows claim three to
 4
 5
     say where, in the step of selecting the echo time repetition --
 6
               THE COURT: I know that.
 7
               MR. FENSTER: Okay. Where the echo time is greater
 8
     than milliseconds.
 9
               THE COURT: Yes.
10
               THE WITNESS: Okay. And what I heard Mr. LoCascio to
11
     say is that if Hajnal meets this limitation of selecting 60
12
     seconds, or greater, then it must necessarily meet the
13
     limitation of (d) in step three.
14
               Is that what you said?
               MR. LoCASCIO: Your Honor, we believe claim four and
15
16
     five, as written, talking about the setting of those TE and TR
17
     times, confirms what was the agreed upon in our reading of the
18
     language of (d)(iii), but at base, I don't think Mr. Fenster
19
     and I have a difference of opinion on this. If there is a
20
     limitation in claim three that is not satisfied by Hajnal, just
21
     satisfying a particular feature of the additional dependent
22
     claim four would not render three, nor four, invalid.
2.3
               MR. FENSTER: We agree on that.
24
               THE COURT: That's right.
25
               MR. LoCASCIO: I think we all went around just on
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1
     words that -- semantic disagreement --
 2
               THE COURT: I think now words are killing you.
 3
               MR. LoCASCIO: To respond --
               THE COURT: You know, if one listens carefully, one
 4
 5
    must come to the conclusion that you agree about this.
 6
               MR. LoCASCIO: We do, on this issue. My view and
 7
     Siemens' view is three, four and five rise and fall together --
               THE COURT: They do --
 8
               MR. LoCASCIO: -- I think Mr. Fenster's view is the
 9
10
     same.
11
               THE COURT: That's right.
               MR. LoCASCIO: And so I want to address a couple --
12
               THE COURT: They do rise or fall together.
13
14
               MR. LoCASCIO: It could be possible that they
     wouldn't, if NeuroGrafix had identified something unique about
15
16
     the additional limitations in four and five, and our point was
17
     that they do not; ergo, they all rise and fall together, Your
18
     Honor.
19
               THE COURT: That's right.
20
               THE WITNESS: Now, I want to respond to two points
21
    Mr. Fenster made. First, the suggestion, Your Honor, that this
22
     was -- in his words -- by ambush, I want to direct the court's
2.3
     attention, and Mr. Fenster's apparently, to two different
24
    passages in the opening brief on this issue. First, the chart
25
     where we laid out why we think the Hajnal reference meets the
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limitations, page 11 of Siemens' opening brief. On the left, we have claim language. On the right, we have the *Hajnal* disclosure, and we say, *Hajnal* discloses the T2 weighted sequence see D.I. 99-1 at 15, stipulating the combination of echo time, TE, and repetition time, TR, referred to in step (d) as commonly called T2 weighting. That is the parties' stipulated construction.

In addition, page three of Siemens brief, the parties -- footnote four -- in the exhibit to the joint claim construction statement stipulate that the language in claim three requiring a combination of echo time and repetition time that exploits a characteristic spin-spin relaxation coefficient of peripheral nerves, cranial nerves three through 12, and autonomic nerves wherein said spin-spin relaxation coefficient is substantially longer than that of surrounding tissue means using what is commonly referred to in a T2 weighted sequence. Again, cite D.I. 99-1 at page 15.

So the suggestion that nowhere in the opening brief was this raised that this was some "gotcha" is false, Your Honor. The parties are operating — and have always been operating — under, first, the agreed-upon construction, and on issues we did not agree on, Your Honor's claim construction order. And on that basis, we sought summary judgment, and we continue to believe we are entitled to summary judgment because there is no dispute under the parties' agreed-on construction

1 that Hajnal meets all of the limitations. 2 The only other point I want to make is if we actually look at the claim language -- because Mr. Fenster's argument is 3 put aside the parties' agreements because we didn't mean it, 4 5 and the practice -- the procedure, and what we've gone through 6 for over a year, suggests we cannot simply, on summary 7 judgment, allow either side to change their tune and change their positions on claim construction. But this premise is 8 9 also wrong. If you look at claim -- the agreed-upon term 10 -this is the parties' agreed language. This is slide 15 in the 10 NeuroGrafix deck -- it not only refers to claim three, it 11 12 refers to claim 25, and in claim 25, the language "is" is 13 replaced by "of these nerves being." 14 And what that refers to, Your Honor, is this collection of things, peripheral nerves, cranial nerves three 15 through 12, and autonomic nerves. "Of these nerves being" is 16 17 not "the nerve being imaged." 18 It is generic description of T2 weighting and the 19 difference between TE and TR in these type of nerves. And the 20 language in the claim itself, in claim three, that Mr. Fenster put up, is slide 11 from the NeuroGrafix's deck. What 21 22 NeuroGrafix points to is the last portion of the claim 23 language, limitation (d) in claim three. Their position is the 24 words "wherein said spin-spin relaxation coefficient is substantially longer" is a stand-alone limitation. It was 25

previously agreed that this whole thing means T2 weighting, but if you actually look, claim construction 101, it is "Said spin-spin relaxation coefficient," meaning there is antecedent basis for that in this claim. "Said" as opposed to "a." And if you look, "said spin-spin relaxation coefficient" -- if you see my blue arrow -- refers to "a characteristic spin-spin relaxation coefficient" of all three of the possible types of nerves at issue.

And so as the parties agreed is what the claim actually means. It says, "Selecting the combination of echo and repetition time." Claims four and five then tell us what those times should be. That exploits something, and what is it exploiting? It's exploiting, i.e., the concept of T2 weighting, a characteristic spin-spin relaxation coefficient. That is inherent in peripheral nerves, cranial nerves three through 12, and autonomic nerves, and that inherent spin-spin relaxation coefficient is substantially longer than that of surrounding tissue.

It is not -- as NeuroGrafix now contends -- an additional limitation that requires one to go in and determine the coefficient of every single thing in the surrounding tissue and the nerve to divine whether or not you have fallen within the scope of this claim. If that was their position, it would have been a significant difference of opinion between the two parties, it would have been significant issue to be addressed

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1
     at claim construction, it would not have been agreed that this
 2
     is simply T2 weighting.
               And to Mr. Fenster's point that Dr. Filler and others
 3
     invented or came up with the idea of T2 weighting, we are
 4
 5
     pulling up the cite that Dr. Filler, in his own deposition,
    makes abundantly clear. They did not invent T2 weighting.
 6
 7
     They were not the first to image a nerve with T2 weighting.
 8
     This is not something, Your Honor -- T2 weighting is not the
 9
     invention, it's in the art, it's described that way, and this
10
     is just applying that known technique, and it is not an
11
     additional limitation as they contend.
12
               Thank you, Your Honor.
13
               MR. FENSTER: Your Honor, Dr. Filler did not invent
14
     T2 weighting; he doesn't claim to have --
               THE COURT: Well, I know he didn't.
15
16
               MR. FENSTER: What he invented was a way to image
17
     nerves in the situation where the T2 of nerve is longer than
18
     that of surrounding tissue, as opposed to where it's shorter
19
     than, which is usually the case in the brain and in the
     arachnoid space. I'm not re-arguing the claim construction
20
     with respect to the definition of nerves, but the claim itself
21
22
     explicitly says -- limits it to that the spin-spin coefficient
2.3
     is -- of nerve is longer than that of surrounding tissue.
24
               Now, unless you agree that we intended to and did
25
     waive that limitation, and even that we could, this limitation
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1
     that wherein said spin-spin relaxation coefficient,
 2
     substantially longer than that of other surrounding tissue,
     that is the only way that you find summary judgment. And, Your
 3
     Honor, that is just not what we intended, and it's not what we
 4
 5
     agreed to.
               This claim 3(d) does refer to T2 weighting, and you
 6
 7
     do use the prior art technique of T2 weighting to determine
 8
    whether or not this limitation is met, whether or not the T2 of
 9
     nerve is longer than the T2 of the surrounding tissue. You can
     not read that limitation out of the claim, and that is what you
10
11
    have to do in order to find that Hajnal meets that limitation.
12
               THE COURT: All right. Is there anything further?
13
               MR. LoCASCIO: I think, in the course of this
14
     discussion, we've -- it has been discussed in some measure. If
15
     Your Honor wishes to hear separate argument --
16
               THE COURT: No, no.
17
               MR. LoCASCIO: -- what I'll call the procedural
18
     aspect motion -- Siemens' position is we stand on our briefs on
19
     those issues.
20
               THE COURT: I don't want to hear any more about the
21
     expert.
22
               MR. LoCASCIO: Then I don't believe we have any other
2.3
    motions before Your Honor.
24
               MR. FENSTER: Nothing further, Your Honor.
25
               THE COURT: It will be submitted. I'll let you know
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1
     if there is to be anything further. Thank you.
 2
              MR. LoCASCIO: Thank you, Your Honor.
              MR. FENSTER: Thank you, Your Honor.
 3
                  (Proceedings concluded at 1:50 p.m.)
 4
 5
 6
                          CERTIFICATE
 7
 8
               I hereby certify that the foregoing is a true and
 9
     correct transcript from the stenographic record of
10
     the proceedings in the foregoing matter.
11
12
                                              October 15, 2011
13
     /S/____
14
         Deborah K. Gackle
                                                    Date
         Official Court Reporter
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Case 2:10-cv-01990-MRP =R7		Aph [1] 3/10 of 1/11 Page ID
360 [8] 44/8 50/3 50/25 51/3 69/12 75/5 84/13 84/25	29 [2] 55/6 57/2 <sup>5</sup> 337	abandoning [1]: 14/1: 1 490 12 ability [1]: 65/21
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72/12 72/18 72/20 73/6 73/10 73/11 73/17 74/15 75/12 80/21 80/22	34 [1]   56/21  35 [3]   21/14 51/1  56/24	accomplished [3] 6/14 25/2 41/17 accomplishes [1] 6/13
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20/7 21/8 21/14 22/15 22/21 23/3 29/22	45 [1] 68/24	actions [1] 36/13
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11:10 [1] 3/1	49 [2] 4/7 6/2	17/18 24/10 36/10
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13 [3] 46/3 85/12 88/14	56.8 [2] 85/9 85/14	addition [1] 93/8
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166 [1] 85/8	62 [2] 41/13 62/21	adhere [3] 29/14 33/2 33/5
17 [2]	620-1149 [1] 1/25 63 [1] 63/13	adhering [5] 7/13 22/24 22/25 29/13 33/2 adhesive [4] 7/12 22/23 29/13 33/3
18 [8] 37/19 44/2 56/8 56/9 56/11 56/19	64 [1] 63/13	adjacent [7] 56/10 56/12 56/13 56/17
60/14 68/19   180 [1]   49/2	655 [1]  2/20  6991 [1]  2/9	59/23 60/9 60/15 adjust [1]  72/4
188 [2] 48/25 49/2		admit [3] 42/22 66/16 70/23
19 [5] 46/3 48/12 48/23 49/4 49/12	7	admits [1] 77/15
1990 [1]   3/5   1992 [2]   31/3 58/7	7106 [1] 98/15  72 [3] 12/8 12/11 12/13	admitted [2] 80/18 80/20 adopted [1] 60/2
1:50 [1] 98/4	74 [2] 12/9 12/11	advantage [2] 77/2 84/24
1st [1] 58/7	7474 [1] 2/9	affirmed [1] 36/8
2	76 [1] 54/12 o	after [5] 17/14 17/20 63/12 65/21 87/3 after-developed [2] 17/14 17/20
2.2 [1] 49/15	8	again [8] 13/22 22/17 22/19 36/15 47/17
2.31 [1] 49/15 20 [5] 45/1 54/1 54/17 60/3 64/8	826-6991 [1]  2/9  826-7474 [1]  2/9	54/11 70/7 93/17 against [1]  88/2
20005 [1] 2/20	83 [3]   55/9 55/11 55/19	agree [28] 7/6 12/17 17/21 18/6 24/17
2011 [4] 1/19 3/1 48/7 98/12	84 [1] 55/15	26/20 32/14 33/8 33/17 38/7 41/3 42/2
202 [2] 2/21 2/21 21 [2] 64/8 64/11	879-5200 [1]  2/21  879-5290 [1]  2/21	42/17 44/3 78/25 79/1 83/7 86/14 86/15 87/21 89/11 89/12 90/18 90/24 91/23 92/5
213 [1] 1/25	9	93/22 96/24
22 [14] 52/7 53/6 57/10 57/17 57/19 57/20 58/2 58/5 58/10 58/13 58/25 59/12 64/6	90012 [1] 1/24	agreed [28] 23/3 39/13 42/6 76/6 76/25 77/9 77/23 78/14 79/16 81/20 81/23 82/18
65/3	90025 [1] 2/8	83/2 86/11 86/12 86/15 86/17 86/24 87/13
23 [3] 52/15 83/18 83/19	961 [1] 36/12	91/17 93/21 93/25 94/9 94/10 95/1 95/9
24 [2] 83/19 84/8 25 [3] 47/5 94/12 94/12	99-1 [2] 93/4 93/17	96/1 97/5 agreed-on [1]  93/25
26 [4] 47/15 53/4 53/24 75/11	Α	agreed-upon [4] 39/13 76/25 93/21 94/9
27 [12] 48/7 53/3 54/11 57/1 57/12 57/15	a-c-t-s [1] 6/1	agreement [8] 29/17 29/21 30/1 76/20 78/4

applies [1] 68/5 54/24 55/18 58/20 59/8 62/7 63/18 64/21 Α apply [6] 6/21,29/25 77/11 78/1 79/22 86/3 apply [6] 6/21,29/25 77/11 78/1 79/22 86/3 applying [3] 76/11 76/12 96/16 1/03/12 appreciate [1# 17/93 8 65/6 68/17 background (6) f51/19 52/17 53/20 57/24 agreement... 3 87/8 87/17 87/19 agreements [1] 94/4 72/14 85/15 apprise [2] 72/24 73/23 agrees [1] 83/10 bad [1] 90/9 ah [1] 87/1 approach [3] 3/22 23/11 66/5 balls [1] 18/23 ah-ha [1] 87/1 base [2] 39/24 91/18 approached [1] 70/5 based [9] 35/25 36/1 38/16 44/17 47/25 ahead [3] 9/25 31/21 31/24 approximately [6] 57/4 57/14 60/17 69/4 akin [2] 22/6 23/1 84/10 84/11 62/16 83/22 86/11 87/11 arachnoid [9] 78/12 79/23 80/2 80/9 80/12 bases [1] 75/25 algorithm [11] 13/20 15/5 18/4 20/20 80/23 81/2 88/4 96/20 33/15 41/24 54/23 55/1 67/25 68/3 69/24 basic [1] 81/9 all [63] are [90] basically [2] 55/24 67/3 alleged [3] 28/13 28/24 62/2 areas [2] 67/21 78/11 basis [7] 74/16 77/7 78/8 80/24 87/6 93/23 allegedly [1] 69/19 allow [3] 30/10 73/13 94/7 allowed [1] 4/13 aren't [2] 70/7 70/14 95/4 argue [6] 65/22 78/1 78/3 78/7 79/3 79/21 basket [1] 70/19 argued [5] 34/9 36/19 48/13 83/14 86/8 be [118] allows [2] 42/22 69/23 argues [1] 69/15 be invalid [1] 90/22 alone [4] 29/16 34/5 49/11 94/25 arguing [3] 24/15 36/17 96/20 because [55] along [2] 3/15 90/7 argument [27] 35/10 36/18 36/22 37/3 43/5 become [1] 20/17 already [2] 25/21 83/13 also [10] 27/3 39/11 44/14 53/4 70/6 79/21 61/13 64/25 65/11 72/16 72/17 78/9 78/10 been [22] 9/20 11/10 11/13 17/3 33/13 35/23 43/21 47/14 62/5 76/4 76/8 78/19 78/13 78/22 79/24 80/3 80/5 80/21 80/24 78/25 80/24 84/4 84/9 87/12 93/20 95/24 80/25 83/12 86/10 88/10 88/14 89/5 94/3 80/18 81/16 81/24 94/9 alternate [1] 32/2 97/15 95/25 96/1 97/14 alternative [3] 14/13 14/15 65/1 before [17] 4/10 13/13 14/9 14/10 23/25 Aristocrat [1] 33/15 Alternatively [1] 41/16 around [10] 41/16 57/5 57/23 65/15 69/24 31/25 32/12 34/17 36/2 39/3 40/8 53/16 although [2] 20/17 23/8 70/15 72/18 78/17 82/23 91/25 65/25 74/11 79/24 90/13 97/23 always [4] 16/4 49/9 79/8 93/20 am [5] 11/21 14/1 27/13 62/25 66/1 begin [2] 10/9 10/12 behalf [2] 3/11 3/13 arrangement [3] 30/12 30/19 31/15 arrest [1] 59/21 ambush [2] 86/9 92/22 among [2] 22/11 35/3 being [11] 43/2 59/6 63/20 66/24 76/7 arrow [1] 95/6 art [23] 9/21 13/4 28/25 31/14 31/16 37/23 80/22 82/16 82/20 94/13 94/16 94/17 amount [1] 17/2 43/12 47/20 47/25 50/17 52/17 52/18 52/22 belated [1] 61/13 believe [18] 8/3 10/10 10/19 11/16 16/8 analogy [3] 33/10 71/24 73/25 53/8 56/2 72/24 73/24 75/13 80/13 81/18 17/24 19/10 26/9 36/12 53/7 75/21 83/9 analyses [1] 48/15 88/21 96/9 97/7 artful [1] 24/22 article [3] 41/6 41/6 44/7 analysis [20] 7/10 9/23 10/20 15/14 19/25 88/10 90/19 91/2 91/15 93/24 97/22 20/25 25/12 32/14 33/21 33/21 35/17 36/8 believes [1] 90/19 41/20 45/13 46/3 50/11 50/11 50/12 51/9 articles [2] 43/23 45/9 below [5] 24/2 46/13 48/19 49/20 55/8 as [100] best [1] 60/19 90/17 aside [3] 28/5 70/3 94/4 better [6] 16/12 16/13 18/3 18/4 41/12 analyte [1] 22/18 analyze [4] 12/18 29/21 30/3 81/18 analyzed [1] 35/22 ask [4] 4/6 40/23 60/24 87/4 79/12 asked [17] 19/4 19/5 30/3 30/4 30/5 39/5 43/11 44/2 44/12 46/14 48/22 52/2 52/13 between [11] 19/13 19/19 22/2 38/25 45/22 analyzing [3] 6/4 23/22 81/13 59/23 60/9 67/9 84/12 94/19 95/24 anatomy [4] 52/25 53/1 72/5 72/7 52/15 66/4 67/21 81/3 big [1] 49/21 ANDREW [2] 2/7 3/10 binders [1] 3/23 asking [8] 6/17 6/20 11/8 14/15 14/16 15/25 86/2 86/3 bit [3] 6/15 20/17 65/3 ANGELES [4] 1/18 1/24 2/8 3/1 black [5] 19/15 19/19 59/5 59/8 67/8 blood [2] 68/24 68/25 bloody [1] 58/4 blue [2] 75/15 95/6 Blvd [1] 2/8 anisotropic [1] 16/7 aspect [1] 97/18 anisotropy [1] 30/15 another [2] 25/15 49/23 aspect motion [1] 97/18 associated [1] 54/4 answer [11] 9/22 11/19 19/4 27/5 39/19 assume [8] 10/6 12/1 14/2 16/11 25/11 44/10 44/10 44/14 45/7 67/22 69/14 25/16 26/16 69/24 answers [1] 28/25 at [97] bone [2] 67/16 81/16 attached [2] 15/12 16/4 antecedent [1] 95/3 Bonekamp [3] 43/10 43/16 44/7 attempting [1] 50/2 attention [2] 74/24 92/23 attorney [3] 61/13 64/25 65/11 anticipate [3] 79/25 81/21 88/24 anticipated [2] 23/17 81/1 borderline [2] 73/10 74/7 both [9] 38/19 40/1 50/20 51/1 64/1 64/21 anticipating [1] 18/20 64/22 85/15 89/12 anticipation [4] 31/13 76/3 89/3 89/4 August [2] 2/6 3/10 bottom [4] 28/3 69/18 83/19 84/20 any [40] automatic [4] 42/10 63/9 66/24 68/8 boundaries [3] 54/3 54/13 74/4 anymore [1] 80/20 automatically [7] 41/17 41/24 63/6 67/18 bounds [1] 72/25 anyone [2] 22/22 62/8 71/12 71/16 71/17 box [2] 19/15 19/19 anything [15] 8/21 8/22 12/4 17/15 22/13 autonomic [4] 82/14 93/14 94/16 95/16 boxes [1] 75/14 22/18 25/14 34/24 40/24 41/25 55/8 62/8 autonomous [1] 80/7 brackets [1] 82/10 86/2 97/12 98/1 available [1] 54/14 brain [4] 31/2 31/4 79/23 96/19 anyway [1] 27/6 avenue [1] 27/4 Brant [19] 38/23 38/24 39/2 40/7 40/23 anywhere [3] 26/11 28/22 68/1 average [13] 46/1 46/20 54/5 54/9 54/10 41/9 42/6 43/11 47/1 48/3 48/21 50/23 55/21 56/3 56/5 56/19 60/12 60/13 63/14 61/18 66/16 66/22 69/11 70/6 80/25 87/2 apologies [1] 11/15 apologize [4] 11/23 17/1 54/24 58/3 apparatus [17] 8/8 8/9 8/17 9/2 9/4 9/4 9/6 Brant-Zawadzki [6] 38/23 40/23 47/1 48/3 avoid [7] 24/22 65/11 78/2 78/18 79/2 83/3 66/16 66/22 10/21 12/18 13/19 15/5 15/8 15/16 17/19 83/12 brief [25] 15/3 21/11 31/21 32/8 42/23 17/23 19/13 19/14 aware [1] 81/3 42/25 43/23 45/9 46/8 47/4 47/6 49/7 61/12 apparently [1] 92/23 appeal [3] 23/4 83/9 88/6 away [1] 75/12 65/25 66/20 69/10 77/22 82/9 82/23 86/23 87/10 92/24 93/1 93/8 93/18 aweiss [1] 2/10 appear [1] 70/12 axial [2] 57/18 57/25 briefed [1] 11/16 appearances [2] 2/1 3/7 axis [1] 43/18 briefing [2] 23/23 37/21 briefly [4] 34/16 58/11 71/3 89/10 briefs [3] 28/3 38/20 97/18 application [1] 4/21 applied [9] 4/9 4/11 4/14 22/16 22/17 29/11 29/18 81/11 85/14 back [15] 7/11 19/23 20/24 21/18 25/1 25/2 bright [3] 54/2 67/10 67/21

_	ohanged [2] 92/15 97/10	16/4 16/5 26/12 26/13 26/24 26/25
<b>B</b>	changed [2] 82/15 87/10 characteristic [12] 76/17/82/2-82/10-82/15	
brighter [5] 51/21 60/15 67/13 72/13 72/14	82/24 86/13 86/19 87/15 87/22 93/12 95/6	concedes [1] 39/16 Page ID
brightest [1] 67/13	95/14 #:5339	concept [6] 62/11 64/2 67/17 70/12 89/12
broad [6] 16/1 17/20 28/18 28/19 28/23	characterization [3] 8/25 9/10 30/8	95/13
46/24	charitably [1] 28/18	concluded [1] 98/4
broad-sweeping [1] 46/24	chart [1] 92/24	conclusion [5] 14/3 14/4 17/4 46/1 92/5
broader [2] 77/12 88/16	check [1] 78/4	concurrence [1] 29/19
broadest [1] 9/7	Chicago [1] 81/9	concurring [3] 4/15 4/18 6/8
brokered [1] 90/25	choices [1] 68/11	condition [5] 22/10 22/11 22/14 35/3 35/14
Bryan [22] 38/20 38/23 39/1 40/22 40/25	choose [6] 37/23 37/23 45/6 47/21 47/22	conditions [1] 35/3
42/3 43/11 46/8 46/9 46/14 48/2 48/4 49/16	48/1	conducted [1] 84/9
49/19 51/1 55/24 66/15 66/22 67/1 67/20		
69/7 72/10	chooses [2] 48/8 70/8	conference [1] 38/17 confident [1] 89/17
99.1	choosing [2] 45/13 69/5	
Bryan's [5] 41/7 45/13 47/22 49/8 71/21	chose [1] 75/13	confirm [3] 48/15 50/9 77/13
built [1] 54/23	circle [3] 64/10 69/19 75/17	confirms [3] 41/5 45/11 91/17
built-in [1] 54/23	circles [1] 45/15	confusing [1] 10/20
but [67]	circuit [27] 4/8 4/12 4/13 4/22 5/11 6/7	consensus [1] 41/5
button [1] 67/5	6/21 11/4 12/9 12/11 20/8 21/3 21/15 22/3	consequently [2] 17/4 25/14
IC	22/15 22/21 24/8 25/6 29/5 29/10 34/13	considered [2] 81/12 84/4
	35/11 35/16 36/9 36/22 37/5 59/24	consistency [1] 43/13
CA [1] 2/8	circuit's [2] 33/11 34/25	consistent [8] 20/8 38/15 43/15 44/1 50/3
calculate [15] 37/22 50/5 50/6 52/1 52/14	circumstance [1] 88/13	50/16 60/6 71/13
53/17 54/10 59/14 61/11 63/13 63/16 63/22		consistently [1] 51/3
65/14 66/4 73/17	cite [5] 23/21 46/7 47/5 93/17 96/5	conspicuity [55]
	cited [5] 4/19 6/8 29/19 36/7 41/6	conspicuous [1] 49/10
60/23	claim [208]	constant [1] 79/7
calculates [1] 49/19	claim construction [1] 13/25	constants [1] 81/17
calculating [1] 50/7	claimed [5] 5/13 7/12 8/6 17/10 20/22	constrain [1] 4/25
calculation [15] 38/4 39/6 43/14 44/24	claims [59]	construction [60]
45/22 47/15 47/19 49/12 49/15 51/2 71/19	clean [1] 80/19	constructions [2] 15/2 31/25
72/21 73/8 73/9 74/15	clear [8] 12/5 21/14 25/23 50/20 86/1 87/10	
calculations [19] 38/14 39/10 39/12 40/3	90/12 96/6	68/14 68/20
48/2 48/3 48/4 48/5 48/16 49/8 49/9 50/2	clearly [6] 55/15 55/17 55/18 72/6 79/13	construed [8] 5/1 5/8 5/9 25/17 25/19
50/8 50/19 64/17 65/18 68/14 70/22 70/23	88/25	77/10 81/2 81/4
calendar [2] 3/4 3/21	clerks [1] 3/24	construing [2] 79/18 81/13
CALIFORNIA [4] 1/2 1/18 1/24 3/1	clicker [1] 23/9	contain [2] 5/21 64/1
call [5] 18/23 33/11 48/2 61/9 97/17	close [2] 73/7 74/6	contains [2] 5/1 5/9
called [9] 23/18 28/18 37/16 43/10 66/24	coating [2] 7/13 33/3	contend [2] 32/15 96/11
68/3 76/2 82/24 93/6	coefficient [21] 82/3 82/7 82/11 82/13	contends [1] 95/19
calling [2] 64/10 66/6	82/20 82/25 84/20 85/16 85/17 86/5 93/12	contesting [1] 83/8
cam [2] 36/25 37/7	93/14 94/24 95/3 95/5 95/7 95/14 95/17	context [4] 27/21 33/12 40/9 72/25
came [3] 38/5 76/20 96/4	95/21 96/22 97/1	continue [1] 93/24
can [56]	coincidentally [1] 69/3	continues [1] 61/23
can't [10] 5/8 14/23 18/9 24/16 24/17 28/13		continuing [1] 59/21
		contrary [5] 4/22 34/25 36/4 65/24 89/7
cancer [1] 31/2	color [2] 60/8 62/3	contrast [14] 22/23 52/6 52/6 52/8 54/8
cannot [6] 11/25 60/2 70/13 78/15 79/14	column [29] 12/7 12/8 19/10 41/13 52/7	57/7 59/23 60/7 60/8 60/10 60/11 60/23
94/6	53/3 53/6 54/1 54/12 57/1 57/12 57/15	67/4 71/25
Cardiac [10] 22/4 22/9 27/21 27/21 35/1		control [1] 12/11
35/2 35/8 35/12 36/3 36/15		controversy [1] 11/25
	81/23 83/18 84/8	
care [1] 32/17 carefully [1] 92/4	column 27 [1] 57/12	cooperatively [1] 12/11 core [6] 28/14 38/6 38/24 47/24 49/13
case [38]	columns [1] 64/1	89/11
	combination [10] 30/18 31/9 31/14 53/5	
cases [10] 21/4 22/3 22/21 28/12 29/5 33/16 35/22 36/2 72/19 74/7	77/1 82/1 86/12 93/4 93/11 95/10	Corp [4] 22/5 22/18 24/3 25/7
		correct [10] 20/8 26/25 29/3 31/1 31/1 42/12 42/15 88/5 91/3 98/9
catch [1] 65/3	combining [1] 6/4	
catch-22 [1] 65/3		correspond [1] 6/14
Caterpillar [2] 36/6 36/9	45/5 70/9 92/5	corresponds [1] 6/13
cats [1] 61/8	comes [7] 18/3 21/17 23/6 40/8 66/12	could [26] 8/17 13/21 20/21 21/12 21/12
centimeter [18] 57/1 57/19 57/24 57/25	69/10 90/18	26/12 35/10 42/18 43/6 43/21 46/22 47/19
58/2 58/24 59/12 59/17 60/18 61/1 61/21	coming [1] 64/21	47/20 47/21 47/24 51/7 52/12 60/23 67/21
64/1 68/12 68/13 68/23 69/19 70/3 71/16	common [5] 13/11 13/14 13/16 13/18 81/9	68/6 73/17 80/7 87/12 87/21 92/14 96/25
centimeters [8] 57/4 57/9 57/14 62/10	commonly [3] 77/4 93/6 93/16	couldn't [2] 43/5 70/4
64/24 69/1 69/4 69/5	companies [1] 16/12	COUNSEL [4] 2/1 3/7 21/5 82/5
CENTRAL [1] 1/2	compared [1] 77/3	counseled [1] 10/2
cerebral [6] 31/4 85/4 85/5 85/7 85/8 85/15		count [2] 80/3 81/2
certain [5] 17/12 17/12 17/20 24/7 67/9	competing [1] 53/12	couple [2] 47/6 92/12
certainly [2] 21/13 43/21	completely [1] 16/19	course [6] 25/22 39/5 68/8 76/19 89/21
certify [1] 98/8	components [1] 59/13	97/13
cetera [2] 9/19 22/19	comprised [1] 17/11	court [73]
challenge [2] 13/12 87/25	computed [2] 52/8 54/6	court's [15] 4/17 8/24 11/13 16/16 29/15
chance [1] 74/13	computer [27] 7/23 7/24 8/1 8/4 8/6 8/12	30/8 32/10 37/25 39/13 77/21 78/13 80/10
change [9] 46/10 46/25 61/24 79/2 82/10	8/14 8/23 9/20 10/9 10/13 10/16 12/8 12/11	81/7 88/5 92/22
82/23 83/4 94/7 94/7	12/13 12/14 12/16 13/20 13/21 15/12 15/14	
		<u>-</u>

described [17] 19/9 26/8 28/1 28/7 28/21 disregarded [1] 81/14 C 33/9 33/13 43/22 43/22 44/21 54/8 58/17 2 60/10 64/13 76/9 84/6 56/9 disservice [1] 17/5 distance [1] 50/24 11 Page ID courts [1] 6/25 - 01990 - MRP describes [9]#1<mark>6/931</mark>/6 51/9 54/11 64/23 cover [3] 19/18 30/6 30/9 distinction [4] 19/13 35/24 36/4 70/3 covered [3] 18/5 32/18 80/17 66/15 68/7 71/18 72/9 distinguish [2] 75/16 84/5 covers [1] 19/15 describing [2] 9/18 83/25 distinguished [1] 30/14 DISTRICT [5] 1/1 1/2 1/5 36/7 78/14 cranial [9] 80/2 80/6 80/8 80/16 80/22 82/3 description [8] 24/9 33/4 34/8 34/12 66/16 93/13 94/15 95/15 67/20 80/6 94/18 ditch [1] 65/15 dive [1] 81/17 divide [1] 59/16 create [2] 20/13 28/4 descriptions [2] 24/4 43/25 created [2] 44/18 57/22 designed [2] 69/2 77/2 creating [1] 39/14 despite [6] 32/23 39/18 41/5 66/14 78/3 divided [1] 52/9 criticism [1] 33/11 80/22 dividing [1] 60/11 detailed [1] 43/24 cross [2] 58/1 64/7 divine [1] 95/22 details [1] 44/9 cross-section [2] 58/1 64/7 do [134] CSR [2] 1/23 98/15 determination [2] 45/3 63/7 doctrine [1] 4/21 cursor [1] 41/16 cut [3] 7/14 59/3 67/11 determine [16] 7/24 11/7 13/6 14/5 17/11 document [1] 62/3 36/18 42/14 44/6 52/14 56/6 62/12 68/18 documentary [1] 40/1 cuts [1] 69/22 86/20 87/23 95/20 97/7 does [54] CV [2] 1/10 3/5 determined [4] 19/15 24/8 59/15 60/13 doesn't [50] doing [12] 12/19 15/5 20/13 22/13 27/23 cylinder [1] 58/2 determines [2] 54/12 66/20 determining [17] 11/7 22/10 22/11 22/14 29/24 31/6 41/2 59/2 64/12 70/23 80/13 35/1 35/2 35/6 35/7 35/9 35/11 35/13 35/24 don't [50] done [31] 8/21 10/8 10/15 15/11 18/22 D.I [2] 93/4 93/17 36/11 36/14 36/15 50/13 51/4 daily [1] 30/24 20/20 26/18 31/2 32/15 32/15 32/17 32/18 developed [3] 17/14 17/18 17/20 damage [1] 31/1 deviate [1] 24/24 34/4 35/14 35/14 39/3 39/9 39/11 39/23 dantly [1] 96/6 devices [1] 44/22 40/8 41/22 41/24 56/16 56/18 61/20 63/5 63/6 72/3 73/5 73/11 73/12 dark [2] 57/23 58/15 dial [3] 22/16 29/11 67/4 data [38] diameter [4] 57/4 57/15 69/4 69/8 dots [1] 64/10 dictated [1] 56/14 down [8] 21/5 23/6 43/14 55/3 55/18 67/7 date [4] 18/22 28/6 66/3 98/14 dictates [2] 56/8 56/11 dated [1] 58/6 81/18 90/18 daughter [1] 30/25 dictionary [1] 23/24 Dr [8] 20/18 38/23 38/23 40/23 46/4 47/1 day [3] 20/23 24/14 74/15 did [23] 5/15 7/5 11/4 21/1 29/17 29/20 49/8 66/19 DC [1] 2/20 31/25 33/23 35/22 52/1 54/18 55/24 56/25 Dr. [72] deadline [1] 65/21 57/25 61/10 71/18 81/21 86/15 90/4 93/22 Dr. Brant-Zawadzki [12] 38/24 39/2 40/7 deal [2] 38/17 76/7 96/6 96/13 96/24 41/9 42/6 43/11 48/21 50/23 61/18 69/11 dealt [1] 7/11 didn't [17] 25/25 29/7 29/8 32/2 34/11 70/6 87/2 dear [1] 30/24 35/23 40/23 50/21 70/17 74/12 79/25 87/25 Dr. Brant-Zawadzki's [1] 80/25 Dr. Bryan [18] 38/20 39/1 40/22 40/25 42/3 debate [2] 40/16 76/7 87/25 88/8 90/9 94/4 96/15 DEBORAH [2] 1/23 98/14 December [1] 58/7 difference [18] 6/9 19/19 22/2 38/25 40/2 45/17 45/22 45/23 46/4 46/21 75/16 77/17 43/11 46/8 46/14 49/16 49/19 51/1 55/24 66/15 66/22 67/1 67/20 69/7 72/10 December 1st [1] 58/7 84/12 90/1 90/5 91/19 94/19 95/24 Dr. Bryan's [4] 41/7 45/13 47/22 71/21 decide [1] 32/8 differences [2] 45/21 77/2 Dr. Filler [22] 39/10 45/13 45/25 47/18 decision [4] 25/10 38/1 38/6 88/6 different [49] 48/5 49/19 49/25 50/18 51/1 61/13 65/22 differently [4] 32/25 39/23 40/2 44/18 decisions [1] 34/25 65/25 66/2 66/9 67/23 69/22 70/8 75/6 deck [6] 23/19 38/4 64/21 76/2 94/11 94/21 difficult [1] 52/11 75/10 96/3 96/5 96/13 decks [1] 62/7 diffusion [7] 16/7 30/13 30/15 30/19 31/9 Dr. Filler's [13] 40/3 47/15 48/15 49/8 49/14 49/25 50/8 50/19 54/17 56/15 69/25 declaration [5] 54/17 56/16 62/1 65/1 65/7 31/15 53/5 deemed [1] 48/13 diffusion-weighted [4] 30/13 30/19 31/9 75/3 75/14 defendant [5] 1/13 2/16 15/2 36/19 64/21 Dr. Moseley [1] 39/9 31/15 defendant's [3] 40/11 61/8 88/14 dimensional [2] 28/4 54/13 Dr. Moseley's [1] 83/23 defendants [4] 3/14 36/8 38/22 88/14 direct [3] 45/3 74/24 92/22 drafted [2] 6/16 6/18 defense [1] 38/12 defined [3] 59/22 59/22 60/8 direction [2] 25/9 41/23 dramatically [1] 46/5 directly [2] 15/17 74/13 disagree [9] 8/24 9/10 20/12 25/21 40/25 draw [3] 65/23 69/24 73/25 defines [1] 52/5 drawing [1] 39/14 44/14 89/16 89/17 89/25 definite [4] 43/2 47/4 47/9 74/1 drawn [1] 35/24 definition [7] 23/25 24/7 24/12 45/3 65/13 disagreed [1] 14/12 drive [1] 29/11 76/18 96/21 disagreement [2] 42/21 92/1 driven [2] 36/25 37/6 disagrees [1] 19/1 during [6] 31/2 59/1 76/19 76/22 76/23 definitions [1] 23/22 demonstrative [3] 65/10 65/11 70/1 denominator [1] 53/21 disclose [3] 32/24 38/13 60/22 disclosed [8] 28/8 69/8 70/4 70/8 70/14 87/2 **Dynamics** [1] 81/9 dep [2] 42/7 46/13 75/5 75/6 77/16 Ε depend [2] 38/8 77/10 discloses [5] 56/25 59/19 77/5 77/15 93/3 dependent [9] 37/19 77/20 79/19 79/20 disclosure [3] 21/18 65/5 93/3 E-mail [3] 2/10 2/10 2/11 88/12 88/15 89/14 89/15 91/21 disclosures [2] 47/14 70/20 each [12] 5/3 5/20 5/25 18/2 22/21 39/8 depending [8] 45/6 46/4 46/21 49/3 49/4 discovery [3] 38/18 62/5 73/13 41/13 54/4 54/13 57/5 58/14 63/4 49/13 49/20 67/10 discretion [1] 32/10 earlier [1] 22/3 discuss [1] 18/10 depends [5] 51/8 79/5 79/6 79/8 89/16 easiest [1] 75/24 discussed [3] 28/22 69/1 97/14 depose [1] 65/22 easily [1] 51/7 echo [11] 76/14 77/1 77/11 82/1 86/13 deposed [2] 66/2 66/10 discussion [4] 18/11 25/15 78/12 97/14 deposition [9] 41/1 42/6 43/12 44/7 48/25 display [1] 12/13 86/18 91/5 91/7 93/5 93/11 95/10 66/7 66/16 87/2 96/5 disposition [1] 16/16 dispute [11] 10/5 40/15 40/15 40/16 40/18 effort [2] 62/13 65/15 eight [2] 43/16 45/10 derive [1] 74/20 describe [14] 20/15 23/21 24/24 25/7 53/7 73/16 80/10 80/15 83/6 93/25 Eighty [1] 55/10 25/10 26/10 28/15 28/16 36/24 37/6 43/13 disputed [2] 52/20 77/5 **Eighty-three** [1] 55/10 44/12 66/13 69/13 disputes [1] 87/20 either [7] 18/25 19/20 33/25 42/21 45/19

expect [1] 25/20 Filler's [14] 40/3 47/15 48/4 48/15 49/8 Ε expedited [1] 32/6 expert [36] #.52 49/14 49/25 50/8 50/19 54/17 56/15 69/25 75/3-75/14 either... [2] 66/1-94/7<sup>990-MRP</sup> elected [1] 80/6 Filed 01/03/12 expert's [1] 85/25341 find [11] 11/4 19/24 36/4 37/8 56/3 56/13 experts [10] 38/7 41/3 42/2 50/20 53/11 60/23 60/24 65/15 97/3 97/11 element [7] 6/13 72/15 73/18 78/4 87/7 87/7 87/16 53/12 53/12 64/22 70/19 70/22 finding [2] 29/15 35/8 elements [3] 17/19 24/4 24/9 fine [2] 4/5 37/14 experts' [1] 45/11 ellipse [2] 58/1 68/13 ellipses [1] 82/10 explain [4] 15/10 37/2 38/14 74/21 explained [3] 6/8 6/9 76/10 first [41] fit [1] 48/1 ellipsoid [2] 43/18 60/18 five [23] 21/8 25/2 48/6 48/14 48/18 48/19 explaining [1] 4/16 elliptical [3] 57/1 57/3 57/14 explanation [1] 32/5 77/10 77/16 78/8 80/1 80/2 80/16 88/16 Ellis [2] 2/18 3/15 explicit [1] 85/25 88/23 89/2 89/3 89/6 90/14 90/21 91/16 explicitly [2] 84/19 96/22 exploit [3] 76/17 86/19 87/22 Elmo [4] 29/9 54/20 57/11 62/4 92/7 92/16 95/11 else [2] 71/2 82/19 FI [1] 2/8 exploiting [2] 95/13 95/13 exploits [5] 82/2 82/10 86/13 93/12 95/12 Email [2] 2/22 2/22 flagged [2] 86/25 87/9 enabled [4] 20/2 20/24 26/4 26/6 flesh [1] 81/19 exposing [3] 5/19 5/19 30/12 Flex [16] 4/14 4/18 6/8 7/10 7/11 22/4 enablement [5] 17/16 17/25 20/15 31/12 31/12 express [2] 86/1 88/25 22/23 23/2 25/6 29/13 29/16 32/14 32/21 enables [1] 18/1 expression [1] 61/6 32/22 33/21 33/22 encompass [2] 17/20 28/23 expressly [1] 84/25 extent [2] 30/8 40/18 Flip [1] 27/12 end [8] 5/23 7/7 12/9 20/23 24/14 40/4 flows [2] 14/3 14/4 fluid [5] 31/4 85/4 85/5 85/7 85/15 70/16 74/15 extrinsic [1] 53/14 focused [2] 72/16 74/6 ended [2] 15/25 47/25 eye [1] 72/14 follow [2] 7/9 78/15 enhancement [2] 60/3 64/4 enough [10] 17/20 33/14 33/22 36/23 following [2] 60/5 60/6 face [4] 30/25 62/13 64/23 70/24 49/11 53/1 67/8 69/3 76/15 89/12 follows [1] 89/6 entire [3] 71/14 71/14 90/17 entirely [2] 46/18 71/12 entitled [1] 93/24 faced [1] 43/1 facie [1] 34/11 footnote [4] 43/23 45/10 46/8 93/9 for,' [1] 5/15 fact [16] 9/2 11/4 22/20 28/1 32/24 39/25 force [8] 22/16 29/7 29/11 36/20 36/21 epitome [1] 51/7 40/15 40/15 40/16 40/18 40/21 47/11 65/9 36/24 37/2 37/6 equivalent [2] 45/19 45/20 79/9 89/1 89/14 foregoing [2] 98/8 98/10 ergo [3] 27/2 44/24 92/17 factor [1] 84/12 form [2] 5/4 12/9 formal [1] 50/10 essence [1] 28/22 facts [2] 40/12 40/20 established [1] 54/4 faint [1] 45/14 format [1] 5/7 formula [4] 52/2 52/3 52/4 60/23 et [2] 9/19 22/19 fair [5] 10/10 10/25 11/3 11/9 13/8 fairly [1] 89/17 forth [5] 7/10 13/7 44/4 65/13 70/10 et cetera [2] 9/19 22/19 evaluated [1] 54/5 faith [1] 87/20 found [17] 11/5 19/22 21/12 21/13 25/10 evaluation [1] 43/21 fall [4] 68/17 92/7 92/13 92/17 29/24 33/4 33/4 33/8 33/9 33/13 35/7 35/16 fallback [1] 43/5 fallen [1] 95/22 falling [2] 40/4 40/5 even [32] 4/13 20/9 21/12 23/3 33/25 34/3 36/16 52/10 54/8 90/20 40/9 42/22 42/25 43/1 43/20 48/15 48/16 foundation [1] 33/5 49/14 50/19 61/20 61/23 62/5 62/9 63/12 four [30] 21/4 29/4 36/10 38/3 53/3 55/2 65/7 65/9 66/13 66/15 68/22 72/17 73/6 false [1] 93/19 77/10 77/16 79/5 88/16 88/19 88/23 89/2 73/13 81/15 81/20 86/22 96/25 far [3] 55/17 73/6 75/12 89/3 89/5 89/22 89/24 90/2 90/3 90/14 event [1] 32/3 fascicle [3] 53/2 64/3 66/5 90/21 91/4 91/4 91/15 91/22 91/22 92/7 ever [2] 4/10 21/12 fascicles [2] 64/5 64/8 92/16 93/9 95/11 fascicular [1] 64/12 every [7] 4/10 34/4 46/16 76/6 81/18 81/19 fourth [1] 65/13 frankly [5] 19/1 26/13 27/24 62/7 86/8 95/21 fat [7] 53/5 79/7 79/7 79/10 79/11 79/12 FREDŘÍCK [1] 2/7 everything [1] 43/6 79/13 evidence [8] 7/4 39/15 44/22 46/12 47/12 Fax [2] 2/9 2/21 Fredricka [1] 3/11 65/7 65/9 73/15 feature [1] 91/21 free [1] 46/19 evidentiary [1] 47/7 Feb [1] 48/7 friend's [1] 30/24 fringe [2] 72/17 73/20 from,' [1] 50/24 front [2] 12/9 29/8 evoked [1] 7/3 evolve [1] 61/24 February [1] 48/6 February 1 [1] 48/6 federal [29] 4/8 4/12 4/13 4/22 5/11 6/7 evolving [1] 62/11 exact [5] 35/10 46/17 48/7 48/8 58/16 front-end [1] 12/9 6/21 6/21 11/4 20/8 21/2 21/15 22/3 22/15 exactly [9] 19/8 22/1 31/24 36/18 36/23 22/20 24/8 25/6 29/4 29/10 33/11 34/13 frontally [1] 65/4 37/2 51/21 69/14 90/4 34/25 35/11 35/16 36/9 36/19 36/22 37/5 full [1] 63/23 59/24 fully [2] 17/24 18/1 examiner [1] 74/17 example [5] 41/15 43/12 49/11 49/23 60/8 examples [2] 42/8 49/16 excellent [1] 88/11 function [72] FENSTER [33] Fenster's [6] 19/25 26/2 92/9 92/23 94/3 functions [2] 17/12 36/10 fung [1] 2/11 96/3 except [3] 12/5 46/21 49/10 few [2] 36/1 67/15 further [9] 5/11 5/15 13/9 17/14 31/19 32/5 exchange [4] 15/2 31/22 31/24 32/7 fiber [1] 43/18 97/12 97/24 98/1 exchanged [1] 4/3 field [3] 39/14 41/4 44/20 G exclude [2] 68/24 69/2 excludes [1] 69/23 Fifteenth [1] 2/20 fifth [1] 65/13 GACKLE [2] 1/23 98/14 exclusively [1] 59/22 figure [16] 33/2 47/21 57/10 57/17 57/19 games [1] 72/10 Excuse [1] 21/5 57/20 58/2 58/5 58/10 58/13 58/25 59/12 general [2] 21/20 21/21 exercise [2] 74/25 75/7 64/6 64/11 78/8 80/1 generally [2] 15/9 88/10 exhibit [7] 54/17 56/15 61/25 62/2 69/17 figure 22 [1] 57/19 generate [19] 9/18 10/23 11/21 13/5 13/18 figured [1] 28/4 figures [4] 48/6 57/17 64/7 64/8 16/7 22/2 23/2 23/6 24/20 24/21 26/22 75/3 93/9 Exhibit A [1] 75/3 28/10 29/12 30/14 30/20 31/11 33/19 34/10 file [5] 7/3 24/23 38/19 62/17 87/4 filed [2] 20/19 79/23 exist [5] 21/15 25/8 46/15 74/7 83/1 generate this [1] 26/22 generated [4] 37/8 58/5 58/23 72/12 existed [1] 61/10 exists [1] 72/17 Filler [35] generates [1] 76/15

her [2] 30/25 31/2 53/14 73/4 G herding [1] 61/85 here [43] #450 improper [6]4 9/2 9/5 14/24-15/7 29/25 generating [1] v34/2 990-MRP -RZ Filed 01/03/12 here's [2] 33#6:433442 generic [7] 24/4 24/9 33/11 35/6 36/16 improvement [2] 28/21 28/24 82/18 94/18 hereby [1] 98/8 improves [1] 17/15 Geneva [1] 51/6 Hey [1] 20/21 in [354] INC [2] 1/12 3/6 get [33] higher [1] 79/14 gets [8] 26/17 46/1 48/17 48/19 49/19 highlighted [4] 55/8 55/9 55/10 63/13 include [2] 80/6 80/8 highlighter [1] 82/1 highlights [1] 55/9 63/17 70/23 75/18 includes [1] 79/7 including [3] 5/17 57/18 80/12 getting [1] 76/13 him [2] 25/13 29/8 give [4] 14/7 19/4 24/24 26/17 inconsistent [7] 24/12 63/10 70/5 71/10 given [4] 24/21 33/11 43/20 44/6 himself [4] 65/25 66/9 69/22 70/9 71/20 77/9 81/6 his [32] 4/15 6/7 39/5 40/8 40/22 40/24 gives [3] 42/8 55/24 63/23 inconsistently [1] 79/19 42/6 42/7 43/12 44/7 44/14 45/25 48/6 incorrect [2] 61/25 78/3 glance [1] 48/10 gloss [1] 28/13 48/25 50/3 50/4 50/15 55/25 65/24 66/1 incredibly [1] 66/2 incumbent [1] 29/21 67/2 67/23 71/24 75/3 75/15 77/24 81/5 go [34] indeed [7] 20/16 32/16 34/8 40/3 41/11 goes [9] 5/11 5/18 57/16 59/5 67/8 67/9 81/8 81/11 81/13 92/22 96/5 history [3] 7/3 24/23 62/17 72/6 84/8 90/7 65/23 70/22 indefinite [7] 9/3 19/22 38/5 39/24 45/19 going [6] 12/8 37/17 66/1 66/14 67/11 homogeneous [1] 46/19 78/20 homogenous [1] 46/16 70/25 83/10 honestly [1] 11/11 indefiniteness [7] 28/14 38/10 51/7 59/24 gone [2] 35/21 94/5 Honeywell [2] 28/12 51/6 good [7] 3/9 3/13 18/18 49/11 54/21 73/11 59/25 70/15 78/22 Honor [129] 87/19 independent [7] 77/20 88/12 88/20 88/21 Honor's [9] 18/22 20/7 28/25 38/6 38/16 88/24 89/13 89/16 got [12] 4/4 12/16 23/15 23/19 23/23 30/25 43/9 49/16 57/21 69/17 75/2 76/3 39/21 76/1 83/7 93/22 Indiana [1] 36/7 HONORABLE [1] 1/5 indicates [1] 7/5 gotcha [3] 86/10 87/1 93/19 hope [2] 16/20 88/7 hopefully [1] 28/25 indicating [1] 84/10 indication [2] 5/15 24/24 governs [1] 64/17 gradients [4] 30/13 30/20 31/9 31/15 host [2] 42/8 64/20 graft [1] 57/18 industry [8] 39/18 40/10 40/13 40/14 40/24 grant [1] 10/4 41/1 41/4 76/5 hours [1] 16/24 granted [1] 25/17 how [122] influence [1] 45/3 gray [4] 85/3 85/5 85/6 85/15 informal [2] 50/10 50/11 how you'd [1] 86/19 great [3] 20/21 36/5 66/23 how' [1] 50/25 information [1] 8/11 informed [2] 77/25 81/7 infringe [14] 16/14 27/2 38/13 81/1 88/20 greater [4] 72/11 72/20 91/7 91/12 however [5] 9/8 17/22 48/1 66/21 84/9 green [3] 69/24 75/14 75/17 hypothetical [5] 20/9 46/15 46/19 74/25 ĞREGĞ [2] 2/19 3/15 89/13 89/13 89/14 89/15 89/16 89/21 89/22 75/7 gregg.locascio [1] 2/22 89/22 90/2 gross [4] 52/24 53/1 72/5 72/7 infringed [1] 17/23 I'II [6] 11/4 42/24 54/19 <del>63/1 97/17 97/25</del> growing [1] 68/3 guess [1] 42/9 infringement [9] 15/14 15/19 17/17 26/18 l'm [22] 6/20 6/23 10/5 10/5 11/8 11/19 38/8 38/15 48/18 48/20 89/21 guidance [3] 14/8 52/13 60/19 11/23 12/1 14/1 14/15 16/15 18/19 24/15 infringes [1] 38/11 24/17 24/18 37/17 49/2 61/25 74/17 89/17 infringing [4] 15/18 16/5 51/8 51/8 inherent [4] 50/6 76/17 95/15 95/16 91/3 96/20 H-a-j-n-a-l [1] 76/6 l've [8] 23/15 23/19 23/23 56/16 63/13 66/8 initially [1] 14/11 injured [1] 59/7 ha [1] 87/1 75/2 76/4 had [21] 9/3 20/19 23/17 34/12 38/16 39/8 i-n-g [3] 5/23 6/9 6/10 input [1] 12/10 inquiry [2] 7/7 38/5 inside [5] 64/10 79/22 80/2 80/9 80/12 39/9 39/11 40/7 61/14 61/17 65/6 70/9 i.e [2] 19/22 95/13 75/11 77/23 78/10 78/12 78/23 84/4 87/4 IBM [1] 12/14 IBM-compatible [1] 12/14 insofar [1] 38/25 92/15 hadn't [1] 28/6 idea [12] 16/24 17/2 17/3 24/11 42/24 47/7 instance [4] 22/10 47/17 48/17 62/19 Hajnal [34] instances [1] 48/19 47/10 68/16 74/4 77/19 81/17 96/4 hand [3] 8/18 9/9 14/23 identical [1] 46/20 instead [1] 65/6 handed [2] 23/16 37/16 handful [1] 47/13 instruction [2] 39/22 41/22 insufficient [2] 33/13 34/5 identification [3] 64/3 64/13 66/5 identified [8] 19/8 19/21 27/11 28/18 38/1 happen [1] 20/1 61/15 63/4 92/15 intend [3] 5/16 7/6 21/18 happening [1] 74/6 identifies [1] 33/24 intended [6] 6/18 7/1 7/4 87/19 96/24 97/4 happens [2] 27/2 72/4 identify [12] 52/17 53/1 53/2 53/9 53/19 intending [1] 6/17 intensities [2] 44/23 54/5 intensity [17] 45/16 46/2 46/6 46/9 46/17 54/2 55/17 55/19 59/14 63/21 72/5 72/8 happenstance [1] 66/1 hard [2] 18/13 57/20 identifying [2] 64/5 64/8 if you [1] 79/14 ignore [3] 20/1 50/19 78/15 has [40] 46/24 54/4 54/9 54/10 55/7 55/21 56/3 60/8 hasn't [1] 52/21 60/12 60/14 63/14 63/16 have [113] ignores [2] 49/7 79/5 intent [1] 7/3 haven't [4] 35/21 73/11 73/12 83/25 iii [4] 76/8 87/7 88/17 91/18 interest [45] having [2] 76/14 79/13 illustrate [1] 54/18 interests [1] 42/19 illustrated [3] 56/16 57/9 57/17 illustrates [1] 59/12 interpret [4] 18/23 24/3 79/15 79/16 he [51] he's [4] 30/2 38/21 48/20 56/18 interpretation [4] 62/12 81/5 81/24 81/25 heading [1] 63/19 image [45] interpreting [1] 86/2 hear [3] 18/16 97/15 97/20 imaged [4] 54/13 82/16 82/21 94/17 interval [3] 55/10 55/11 55/14 heard [1] 91/10 images [10] 45/12 54/14 57/2 57/12 57/21 into [7] 15/8 36/25 37/7 81/18 81/18 82/11 hearing [5] 32/9 61/14 62/17 76/22 76/24 67/13 67/18 75/2 75/6 75/14 82/19 heart [5] 22/11 35/3 35/4 35/14 78/23 held [3] 4/17 5/20 50/18 help [1] 30/24 intro [1] 64/3 invalid [3] 90/21 90/22 91/22 impacts [1] 45/8 implementation [1] 33/18 implies [1] 40/18 invalidate [2] 16/17 60/1 helpful [1] 78/19 import [1] 15/7 invalidating [1] 16/24 helps [1] 63/1 important [6] 15/24 30/23 31/3 35/12 invent [2] 96/6 96/13

later [4], 25/24 71/18 79/1 88/7 01/03/12 latirude [1] 63/23 law [21], 4/22 6/21 6/21 17/17 18/2 18/23 leoks [2], 27/14 51/24 LOS [4] 1/18 1/24 2/8 3/1 Page ID Mvented [2] 96/4 96/16 - MRP - RZ invention [3] 30/23 59/10 96/9 lose [2] 34/17 34/18 inventor [2] 20/18 48/16 20/8 21/2 21/3 21/8 21/14 35/16 36/5 45/18 lost [1] 32/3 inventors [4] 20/18 21/18 28/4 39/10 59/24 73/22 81/11 88/11 88/18 89/7 89/18 lot [3] 41/10 55/15 67/19 lead [7] 44/17 44/23 47/19 48/1 48/23 50/9 lots [1] 31/6 invoke [4] 5/16 7/1 7/4 7/6 involve [1] 35/23 70/21 love [1] 18/11 involved [2] 36/1 36/10 involves [2] 35/19 36/13 leads [2] 43/25 45/21 leans [1] 18/21 lower [4] 4/11 29/14 29/15 36/25 lung [3] 46/2 48/5 49/10 IPXL [1] 9/3 learned [2] 87/3 87/6 М irrelevant [7] 9/23 13/23 45/4 49/24 72/21 least [4] 37/20 51/21 59/24 60/9 machine [7] 7/22 15/12 16/4 18/4 26/21 81/12 89/2 leave [1] 39/17 leaves [3] 42/3 42/15 42/22 irrespective [1] 12/22 26/23 76/13 left [14] 23/4 23/8 29/16 41/13 41/21 44/21 is [643] made [6] 38/2 51/13 75/4 75/6 88/11 92/21 magic [1] 23/8 mail [3] 2/10 2/10 2/11 isn't [8] 7/8 8/1 12/4 15/20 18/14 25/14 47/15 58/11 58/15 58/25 59/10 67/3 75/17 49/11 75/7 issue [25] 14/10 20/4 20/16 21/4 26/1 maintain [2] 88/2 88/4 less [1] 18/21 let [15] 6/15 7/14 10/4 12/5 18/13 18/16 27/22 29/22 31/22 32/1 39/11 40/21 48/11 majority [4] 4/14 29/16 73/5 73/16 64/1 67/18 68/12 70/16 75/20 77/25 81/3 19/3 20/24 27/3 29/2 29/3 36/6 57/11 75/23 make [11] 25/23 35/10 44/16 44/19 67/18 68/21 79/17 81/25 82/12 90/13 94/2 81/8 83/13 92/6 92/24 95/8 95/25 97/25 let's [29] 3/17 3/18 3/18 3/20 9/13 10/6 issued [1] 74/16 makes [4] 21/14 38/9 45/23 96/6 making [3] 38/7 88/14 90/9 issues [6] 19/6 28/14 76/2 76/3 93/22 11/24 14/2 16/11 21/15 22/3 25/11 25/16 manner [1] 61/12 97/19 26/14 26/16 29/2 32/6 32/11 34/15 37/10 it [402] 37/14 54/23 58/3 58/20 59/20 62/7 72/3 manual [1] 68/9 74/8 75/19 it's [116] manually [9] 41/15 41/22 42/11 57/3 63/6 letting [1] 21/7 level [1] 55/11 item [1] 3/4 69/23 71/12 71/16 71/17 many [5] 41/5 42/5 67/15 71/11 71/15 MARC [2] 2/6 3/9 its [10] 4/7 4/19 11/17 13/14 29/19 37/21 lever [3] 29/11 36/24 37/6 47/3 52/10 62/16 83/4 life [1] 25/24 itself [7] 11/13 38/13 42/7 70/18 70/22 **MARIANA** [1] 1/5 94/20 96/21 light [1] 75/15 Markman [11] 23/23 25/10 28/2 37/21 38/1 lightly [1] 86/9 39/7 45/25 50/6 61/14 75/4 76/22 like [13] 20/4 29/12 29/13 33/20 35/9 35/15 Masco [8] 4/22 22/5 22/16 29/5 29/9 29/10 job [2] 17/8 18/22 joint [1] 93/9 36/15 45/9 62/14 74/3 77/17 80/14 90/21 29/14 36/19 limit [2] 15/16 25/13 mat [2] 7/13 33/5 limitation [43] JUDGE [10] 1/5 4/15 6/7 7/10 10/2 29/18 material [2] 40/15 40/16 29/24 32/14 32/22 33/4 materially [1] 30/24 limitations [10] 77/11 77/12 88/15 88/22 judgment [15] 40/12 75/21 78/15 78/17 89/2 90/2 90/14 92/16 93/1 94/1 materials [1] 67/1 78/18 78/21 79/2 83/3 83/9 83/11 83/13 limited [11] 9/1 12/3 15/4 31/8 78/10 80/4 mathematical [1] 44/16 93/23 93/24 94/7 97/3 84/15 84/19 84/23 84/25 88/3 mathematically [1] 45/7 jump [1] 17/4 limits [2] 51/18 96/22 mathematics [1] 70/22 jumped [1] 17/5 line [15] 19/10 48/25 49/1 52/11 53/4 57/15 matrix [1] 43/19 jury [2] 14/8 14/19 62/21 62/24 62/25 63/13 73/25 74/1 74/3 matter [19] 3/4 10/14 10/15 16/13 24/23 25/5 27/15 28/14 47/11 68/15 79/9 85/3 just [76] 74/4 75/7 line 26 [1] 53/4 85/5 85/5 85/6 85/8 85/15 89/14 98/10 matters [1] 38/25 may [17] 3/22 17/14 23/11 25/8 32/12 lines [9] 41/13 43/17 45/14 53/3 53/6 54/1 Kabat [2] 2/6 3/10 key [3] 21/17 34/13 84/13 54/12 55/3 57/2 link [1] 12/4 34/16 34/17 34/21 41/14 48/10 63/4 71/11 killing [1] 92/2 Liquid [1] 81/9 71/12 71/14 71/15 74/11 88/22 kind [2] 21/20 86/3 listens [1] 92/4 McEldowney [2] 2/19 3/16 lists [1] 5/18 Kirkland [2] 2/18 3/15 me [34] kirkland.com [2] 2/22 2/22 lit [1] 67/9 mean [9] 11/1 15/13 15/15 15/18 31/23 knew [2] 65/25 83/2 literature [4] 41/4 43/8 44/25 50/20 34/24 54/16 88/20 94/4 knife [1] 59/3 litigation [1] 86/9 meaning [16] 4/24 11/16 13/12 13/14 knob [1] 22/17 little [5] 6/15 20/17 57/20 59/5 59/7 13/16 13/19 19/25 24/12 26/2 26/16 46/16 knock [1] 79/12 LLP [2] 2/18 3/15 48/18 48/19 82/16 84/4 95/3 know [29] 6/11 15/23 21/7 25/23 30/16 LOCASCIO [14] 2/19 3/15 25/24 29/4 meaningfully [2] 46/10 46/25 32/8 43/14 44/21 44/22 47/9 52/22 53/8 34/23 35/10 36/17 71/8 71/20 87/1 87/24 means [34] 88/10 91/3 91/10 53/11 53/13 55/2 61/16 67/6 72/7 72/17 means-plus-function [11] 5/4 5/6 5/7 72/22 73/7 73/8 73/18 90/4 91/1 91/6 92/4 LoCascio's [5] 30/7 37/3 71/4 89/23 91/2 10/21 12/18 12/20 19/16 21/9 23/7 83/6 96/15 97/25 logical [1] 88/18 83/10 long [4] 43/18 52/11 76/23 76/25 knowledge [1] 40/8 meant [8] 76/20 77/24 77/25 79/3 81/24 longer [25] 79/7 82/7 83/21 84/14 84/16 82/19 83/3 87/19 known [1] 96/10 knows [1] 37/18 84/21 84/22 85/9 85/10 85/16 85/18 85/18 measure [4] 37/24 49/3 68/18 97/14 85/22 85/24 86/5 86/16 86/21 87/15 93/15 Krak [1] 45/2 measured [2] 38/11 38/12 94/25 95/17 96/17 96/23 97/2 97/9 measurement [2] 38/9 46/18 measurements [1] 84/9 look [31] 6/18 6/25 7/2 7/3 10/1 11/24 measures [2] 39/2 46/1 17/11 20/14 21/3 21/15 21/23 24/2 28/15 lack [2] 41/12 79/12 laid [2] 38/17 92/25 32/21 32/22 44/24 46/12 56/22 58/20 59/4 MEDICAL [6] 1/11 3/5 3/14 50/1 52/1 52/21 63/25 66/19 74/3 75/14 81/5 81/22 82/20 meet [13] 15/19 77/20 85/2 85/20 88/16 language [46] larger [5] 41/14 42/11 48/11 63/5 64/10 88/19 88/22 88/23 89/1 89/23 89/24 90/2 94/3 94/9 95/2 95/5 last [7] 22/4 23/19 65/15 68/11 70/11 75/20|looked [6] 29/10 35/1 41/10 51/3 57/12 91/12 meets [6] 77/19 88/15 91/11 92/25 94/1 94/22 76/19 last-ditch [1] 65/15 looking [14] 7/16 9/5 19/5 33/7 45/20 97/11 lastly [1] 81/22 48/20 51/17 58/12 72/20 73/7 73/8 74/17 mentioned [1] 86/22

late [2] 62/6 69/25

79/21 83/17

object [3] 6/3 6/6 30/7 need [15] 13/8 14/17 16/23 20/12 26/10 M 33/24 44/18 45/18 56/9 59/13 63/9 74/21 77/20 807 9 81/14 needs [4] 14/5 14/7 32/15 61/20 objection 11, 12/2 objects [1] 8/5 111 Page ID mentions [2] 61/21 77/23 WIR P Mercantile [1] 81/9 obligations [2] 34/6 65/5 neither [2] 39/5 65/9 met [17] 8/20 17/13 72/15 73/18 78/7 78/8 obtain [1] 28/20 85/23 85/25 86/6 87/8 87/16 87/23 89/1 nerve [115] obvious [3] 72/13 72/19 76/5 89/5 89/6 89/6 97/8 nerve-to-muscle [1] 52/8 obviously [5] 25/20 32/9 77/19 78/21 88/2 method [42] nerves [34] OCTOBER [3] 1/19 3/1 98/12 methods [9] 18/5 31/6 42/18 42/25 52/25 63/12 68/18 70/21 70/21 net [1] 50/13 neural [34] of,' [1] 5/14 off [5] 5/13 19/3 19/8 20/25 67/11 **NEUROGRAFIX** [40] mfenster [1] 2/10 offer [1] 11/21 microphone [1] 82/5 NeuroGrafix' [2] 20/12 21/10 Office [1] 80/18 NeuroGrafix's [11] 28/2 40/14 42/5 42/23 Microprocessor [1] 60/2 Official [1] 98/14 microscope [1] 74/3 44/2 50/5 61/18 63/7 69/10 81/15 94/21 Oh [4] 10/16 11/12 15/23 27/19 mid [1] 55/11 neurogram [3] 30/25 58/22 59/10 okay [24] 7/15 11/3 11/6 11/15 11/18 14/4 middle [3] 59/4 59/7 64/9 neurography [5] 63/19 63/20 64/19 73/5 15/1 16/22 17/1 17/7 18/8 22/4 25/24 26/15 might [5] 23/17 47/5 89/10 90/6 90/11 28/5 39/22 55/13 56/1 63/3 66/14 75/20 milliseconds [3] 84/11 84/12 91/8 never [19] 4/8 20/20 24/23 24/24 28/21 75/23 91/7 91/10 minute [7] 3/19 12/1 14/2 16/11 25/16 34/18 35/23 39/3 40/8 61/10 61/20 62/4 on [175] 62/20 66/20 62/5 77/22 77/25 78/13 81/7 86/23 86/25 onboard [1] 25/25 new [13] 18/3 18/4 38/21 77/18 78/1 78/1 mistake [1] 90/9 once [1] 73/2 mixed [1] 9/3 mole [1] 61/9 78/3 79/17 81/15 81/24 81/25 82/24 83/22 one [65] next [14] 5/5 5/12 5/22 26/14 31/19 47/13 only [30] 4/12 5/25 10/1 13/12 13/12 14/10 moment [2] 87/1 87/2 52/23 55/13 55/21 55/25 56/9 57/16 63/13 26/3 28/6 32/1 32/20 34/3 40/17 48/2 50/1 months [1] 66/3 85/21 60/21 64/25 70/2 72/16 72/16 73/9 76/7 more [14] 35/6 37/1 43/6 43/22 44/3 44/5 nice [1] 59/6 77/7 77/17 79/24 80/8 81/5 83/12 94/2 49/10 63/3 67/19 73/2 73/8 77/8 79/13 nine [2] 19/10 40/7 94/11 97/3 97/20 no [72] open [4] 15/25 38/1 42/4 47/25 No. [2] 3/5 3/21 open-ended [2] 15/25 47/25 Moreover [2] 5/8 8/1 opening [8] 28/2 40/22 55/25 86/23 87/9 morning [5] 3/9 3/13 4/4 18/18 62/7 No. 3 [1] 3/21 Moseley [4] 39/9 46/4 48/4 84/7 No. CV [1] 3/5 92/24 93/1 93/18 operate [3] 6/2 11/20 14/18 Moseley's [1] 83/23 noise [2] 46/17 46/19 operating [3] 13/17 93/20 93/21 most [1] 72/19 noise-free [1] 46/19 motion [14] 3/18 3/20 25/16 34/21 38/25 non [31] 45/23 46/2 47/18 51/8 56/7 56/11 operation [1] 12/12 40/12 62/18 65/8 78/21 79/23 80/19 88/1 56/12 56/12 56/17 56/18 56/21 56/22 56/24 operative [1] 59/1 operator [1] 42/15 59/23 60/9 60/14 60/15 60/16 60/17 61/2 88/8 97/18 63/8 67/15 68/15 68/19 68/25 69/2 69/6 operators [1] 42/17 motions [2] 1/21 97/23 mountain [1] 74/3 75/18 78/5 79/4 79/6 opining [1] 81/10 move [2] 34/20 74/11 non-infringing [1] 51/8 opinion [10] 4/14 4/15 4/16 4/19 6/8 29/16 moving [2] 41/16 62/11 non-nerve [2] 56/17 56/18 36/9 70/2 91/19 95/24 Mr [19] 20/10 20/25 30/7 34/23 35/9 36/17 non-neural [28] 45/23 46/2 47/18 56/7 opinions [3] 81/8 81/12 81/13 62/4 71/4 71/8 71/20 74/13 87/24 88/10 56/11 56/12 56/12 56/21 56/22 56/24 59/23 opposed [3] 5/14 95/4 96/18 60/9 60/14 60/15 60/16 60/17 61/2 63/8 opposite [1] 69/14 89/11 91/2 91/3 91/10 91/18 94/20 Mr. [36] 67/15 68/15 68/19 68/25 69/2 69/6 75/18 opposition [11] 42/23 61/12 62/18 65/2 78/5 79/4 79/6 65/8 66/20 69/10 77/22 79/25 87/3 87/13 Mr. Fenster [24] 9/14 16/19 20/3 23/21 25/4 25/12 29/2 51/15 61/19 61/23 62/2 none [7] 17/3 19/24 26/20 47/6 62/17 options [1] 41/5 62/14 63/6 63/15 64/6 64/15 68/17 69/18 64/15 68/1 or [115] 76/24 83/16 90/12 90/18 90/19 92/21 order [16] 3/17 4/19 11/21 13/5 23/17 nonexpert [1] 38/18 Mr. Fenster's [6] 19/25 26/2 92/9 92/23 noninfringement [3] 38/8 38/15 77/7 30/13 30/20 30/21 31/10 38/16 52/10 65/5 nor [7] 8/16 8/17 39/5 46/11 47/12 65/9 94/3 96/3 89/20 89/21 93/23 97/11 ordinary [10] 13/12 13/14 13/16 13/18 Mr. LoCascio [3] 25/24 29/4 87/1 91/22 19/25 24/12 26/2 31/20 32/6 52/16 Mr. LoCascio's [2] 37/3 89/23 normal [4] 13/25 14/6 14/6 59/6 Mr. Weiss [1] 62/1 North [1] 1/24 original [13] 33/16 39/7 45/25 49/8 49/25 MRI [9] 7/22 12/12 15/12 16/4 18/3 26/21 Northern [2] 36/7 78/14 51/2 57/21 58/4 58/9 58/12 58/21 58/22 26/23 63/21 76/12 not [237] 89/15 MRP [1] 1/10 notch [1] 55/14 originally [4] 50/4 59/20 78/12 82/19 much [5] 18/21 72/11 72/13 72/20 73/8 originated [1] 45/12 note [1] 63/24 multiple [1] 51/4 notes [1] 22/8 Osirix [1] 67/25 other [28] 18/16 18/22 22/4 27/4 28/12 muscle [6] 52/8 52/9 83/22 84/6 84/10 nothing [8] 5/1 5/9 20/12 20/13 33/20 84/15 35/21 68/7 97/24 31/7 33/15 35/11 35/12 35/16 40/9 42/25 must [12] 17/4 30/3 38/13 68/17 77/20 notice [1] 86/23 43/23 56/13 56/20 58/14 60/16 64/7 67/16 88/16 89/6 89/15 89/21 89/22 91/12 92/5 notwithstanding [1] 29/25 68/8 68/19 81/10 83/5 84/21 85/7 94/2 97/2 my [16] 3/15 11/15 12/6 17/8 17/23 18/22 97/22 novel [1] 28/24 novelty [14] 27/8 27/16 27/24 28/1 28/11 22/8 32/20 33/6 37/12 65/14 74/20 90/11 others [4] 32/11 47/6 83/23 96/3 otherwise [1] 47/2 28/13 28/20 30/6 30/10 30/17 30/18 31/11 90/20 92/6 95/6 31/17 74/16 ought [2] 63/25 68/20 Ν now [65] our [13] 14/17 43/23 45/9 61/25 80/3 86/24 naked [1] 72/13 nowhere [3] 20/4 28/7 93/18 87/3 87/8 88/4 88/5 91/17 92/16 97/18 namely [3] 64/19 76/14 81/11 numbers [3] 46/3 46/20 47/23 out [23] 5/17 10/6 12/6 12/7 12/23 20/9 numerator [2] 53/19 56/3 22/10 28/4 28/22 33/2 36/6 38/5 38/17 62/1 narrow [1] 76/1 narrowing [4] 60/1 60/4 60/6 88/19 narrows [1] 91/4 63/15 64/18 67/19 69/23 79/13 87/1 87/12 nutshell [1] 18/25 NW [1] 2/20 92/25 97/10 near [1] 73/10 outcome [3] 20/13 45/4 45/5 necessarily [3] 88/16 89/24 91/12 outside [8] 31/4 40/5 47/22 78/11 79/19 necessary [3] 14/6 32/9 88/6 O.I [4] 22/5 22/18 24/2 25/7 80/23 81/5 88/3

pick [1] 72/3 80/13 81/18 83/22 88/20 97/7 O piece [7] 22/12-27/25 21/14 73/25 74/1<sub>12</sub> 80/14 81/19 17/5 probably [4] 75/24 11 problem [4] 20/14 33/6 70/15 3/2 6ver [8] · 23/9 28/13 28/25 41/16 52/7 53/13 pieces [3] 69#22280#1 80/12 procedural [1] 97/17 62/5 94/6 pixel [7] 41/14 42/10 46/16 63/5 63/14 68/9 procedure [2] 24/2 94/5 overall [1] 67/3 overcome [2] 25/9 34/7 proceed [2] 23/17 73/13 pixels [4] 43/19 54/4 67/9 67/13 overwhelming [2] 73/5 73/16 proceedings [3] 1/17 98/4 98/10 own [16] 11/17 40/3 40/17 42/25 43/8 place [7] 41/23 43/3 43/18 46/21 49/21 process [45] 44/22 47/1 48/4 50/15 65/12 65/18 68/22 53/13 78/24 processed [3] 37/4 57/3 57/13 69/10 70/6 74/20 96/5 placement [1] 45/8 processing [66] Oxidal [1] 45/7 places [1] 79/10 processor [4] 10/16 10/19 33/13 33/14 Ozsunar [1] 41/6 plain [3] 56/14 86/4 87/14 produced [1] 62/4 plaintiff [7] 1/9 2/4 15/2 38/10 38/23 39/11 program [1] 12/16 programmed [4] 8/4 8/15 8/23 9/20 63/20 programming [1] 12/24 p.m [1] 98/4 plaintiff's [1] 28/2 plaintiffs [4] 3/12 74/25 87/18 88/3 prompted [1] 32/19 Pacemakers [10] 22/5 22/9 27/21 27/21 plan [2] 38/17 38/18 35/1 35/2 35/8 35/12 36/3 36/16 pronounced [1] 76/4 proper [5] 14/14 15/1 15/3 15/15 83/11 page [10] 24/3 28/3 44/7 49/2 63/18 66/6 played [1] 20/9 85/4 93/1 93/8 93/17 playing [1] 72/10 properly [1] 60/2 please [9] 3/7 4/20 5/12 21/5 52/15 61/5 paper [2] 74/1 74/1 proposal [1] 32/3 paragraph [9] 4/24 5/16 5/17 7/2 7/6 20/1 74/9 82/5 83/16 propose [2] 60/4 60/6 proposed [7] 15/2 26/3 31/25 59/20 61/9 21/14 57/16 59/1 plexus [1] 48/5 plural [1] 82/14 parameter [3] 52/8 54/8 57/7 77/18 81/15 plurality [1] 35/3 parameters [1] 55/1 proposition [1] 46/24 pardon [7] 21/6 23/15 38/22 61/6 67/15 plus [60] prospect [1] 43/2 81/1 89/13 point [57] protect [1] 88/1 pointed [3] 46/13 52/4 63/15 pointing [2] 45/14 59/2 parse [1] 53/11 protection [1] 57/18 provide [1] 44/8 providing [3] 36/11 36/13 84/12 part [6] 6/20 39/21 56/16 78/21 78/22 pointless [1] 27/4 89/25 particular [19] 9/2 15/5 15/5 15/16 28/11 points [11] 19/7 21/11 46/7 63/24 63/24 provision [2] 4/24 83/1 41/19 42/24 43/18 43/19 44/20 47/16 69/13 64/2 64/6 64/24 90/13 92/20 94/22 publications [1] 40/1 76/16 77/16 78/6 84/24 84/24 88/13 91/21 pull [1] 22/9 pop [1] 67/19 particularly [1] 68/5 parties [14] 23/3 41/3 76/18 77/9 77/23 portion [5] 59/7 61/21 69/23 80/9 94/22 pulled [1] 87/1 pulling [1] 96/5 pulse [2] 76/11 76/12 position [22] 7/25 9/19 13/6 14/11 14/17 . 16/8 18/7 21/10 49/25 50/6 50/18 61/11 78/17 81/20 81/23 82/18 83/2 93/9 93/20 purely [2] 46/15 65/10 61/23 63/7 65/6 79/8 88/4 88/5 90/11 94/23 95/9 95/25 parties' [7] 29/17 29/20 30/1 93/6 93/25 purporting [1] 10/5 95/23 97/18 94/4 94/10 positions [2] 78/17 94/8 purpose [7] 25/15 44/6 44/11 44/15 44/19 partner [1] 3/16 posits [1] 53/15 50/13 78/15 possibilities [1] 42/4 passage [2] 22/19 64/16 pursue [1] 27/4 put [18] 15/17 23/16 23/21 24/1 24/7 24/13 passages [1] 92/24 possible [2] 92/14 95/7 29/8 46/13 47/14 62/2 62/4 63/1 65/2 65/13 passing [1] 22/18 possibly [1] 73/17 patent [103] post [1] 57/3 66/10 86/23 94/4 94/21 patentee [4] 5/15 7/1 7/4 7/5 post-processed [1] 57/3 puts [2] 62/14 64/15 potentially [1] 54/2 putting [3] 28/5 67/17 70/3 patents [2] 33/10 70/13 patient [1] 76/12 pattern [1] 53/3 practical [1] 10/14 practice [2] 46/15 94/5 Q practicing [2] 38/24 73/24 preamble [2] 5/12 5/13 penned [1] 4/15 qualify [1] 39/4 people [5] 30/24 43/12 44/16 47/24 76/5 quantitative [1] 45/3 perceive [1] 16/16 preceded [1] 64/7 quarreling [1] 6/24 precedents [1] 34/13 perceived [1] 34/3 query [1] 52/19 perceives [1] 31/19 percent [4] 45/17 45/21 45/22 46/4 perfect [1] 60/20 question [33] precise [1] 43/6 precisely [1] 11/8 questions [7] 19/3 30/4 37/22 38/6 51/25 predetermined [3] 30/12 30/19 31/15 52/15 61/3 perfectly [2] 18/6 18/7 predictable [1] 43/15 quintessential [1] 70/1 perform [9] 8/17 10/23 13/7 15/15 16/6 premise [2] 89/12 94/8 quite [2] 32/25 58/13 18/1 20/15 28/17 51/1 prepared [3] 11/19 11/21 19/7 quote [4] 24/3 28/3 46/23 69/11 prescient [1] 66/2 quoted [1] 83/25 performed [3] 17/13 39/5 41/15 performing [2] 28/16 43/21 performs [2] 17/21 18/5 prescribe [1] 44/4 R prescribed [1] 24/2 perhaps [1] 6/16 prescribing [1] 44/5 Rader [8] 4/15 6/7 7/10 10/2 29/24 32/14 peripheral [7] 80/7 82/3 82/13 84/11 93/13 presence [1] 53/2 32/22 33/4 Rader's [1] 29/18 94/15 95/15 present [1] 11/18 presented [4] 11/10 11/13 11/13 11/14 PRESIDING [1] 1/6 radiologists [1] 38/24 permission [1] 87/4 raise [1] 32/13 raised [10] 13/13 14/9 14/10 37/21 51/25 permit [1] 9/21 person [6] 6/18 13/3 40/4 48/16 52/16 presumed [2] 6/22 59/25 presumption [6] 6/23 24/22 25/8 25/21 52/21 78/13 87/8 87/24 93/19 52/18 32/23 34/7 personal [1] 12/14 raises [1] 27/10 presumptively [4] 5/7 23/4 23/7 24/15 perspective [2] 17/25 61/8 raklaw.com [3] 2/10 2/10 2/11 previously [6] 23/25 30/21 76/10 84/4 84/5 ran [2] 48/5 49/16 persuasive [1] 38/2 PFAELZER [1] 1/5 random [1] 72/3 Pharmaceuticals [1] 51/6 prima [1] 34/11 range [3] 45/17 45/21 46/3 ranges [1] 77/16 phase [2] 14/11 38/22 primary [2] 21/4 29/4 Phone [2] 2/9 2/21 principles [1] 68/16 Raters [1] 43/20 phrase [2] 5/14 77/1 prior [10] 28/25 31/14 31/16 39/7 45/25 ratio [10] 52/6 52/9 52/12 52/14 53/20

requirement [4] 15/19 51/18 51/25 86/16 32/22 33/21 33/22 R requires [17] 19/22 15/22 18/2 30/12 33/21 50/7 51/20 70/17 73/23 77/8 78/4 81/20 Seal-Flex [16] 4/14 4/18 6/8 7/10 7/11 22/4 22/23 23/2 25/6 29/13 29/16 32/14 32/21 ratio... [5] 53/21 54/7 57/7 60/24 77/14 84/22 85/21 86/4 97/14 95/20 32/22 33/21 33/22 re [1] 96/20 re-arguing [1] 96/20 requiring [1] 93/11 SEAN [4] 2/19 3/16 23/10 27/12 read [6] 9/12 28/22 64/18 66/8 70/14 97/10 Research [1] 58/6 sean.mceldowney [1] 2/22 reader [2] 25/24 60/25 second [14] 11/5 27/17 36/6 37/16 37/25 reserved [1] 83/8 reading [4] 19/10 62/8 86/24 91/17 resolve [2] 11/25 87/19 39/17 39/21 52/18 53/20 57/2 57/13 62/22 real [8] 10/5 53/7 72/11 72/18 72/23 72/25 resort [1] 4/23 64/14 71/20 respect [20] 26/18 28/9 29/5 30/5 33/10 seconds [1] 91/12 73/21 74/7 real-world [1] 72/25 35/10 37/20 37/25 40/6 40/20 48/22 48/24 section [12] 4/24 5/16 7/1 21/14 21/23 realize [1] 6/16 49/14 53/21 69/11 71/21 83/5 83/11 88/5 46/19 47/18 58/1 63/18 64/3 64/7 69/24 really [7] 16/21 18/12 53/14 65/21 78/23 96/21 sections [2] 23/16 57/5 79/22 88/11 respectfully [1] 4/6 see [41] reason [2] 18/9 79/23 reasonably [2] 72/24 73/23 respond [6] 34/17 34/21 61/23 65/21 92/3 seek [2] 87/25 88/8 92/20 seem [1] 48/10 reasoned [1] 37/1 seems [2] 21/10 51/24 responding [1] 74/13 rebuttal [1] 75/3 response [5] 40/14 46/7 47/3 49/24 76/16 seen [1] 4/2 rebutted [1] 25/9 segmentation [3] 54/23 55/1 67/24 rest [1] 67/10 result [9] 43/15 44/1 45/20 47/11 55/24 recall [2] 54/7 71/22 select [17] 42/18 47/19 52/18 52/22 52/24 recited [7] 6/1 10/2 13/7 17/13 17/22 35/17 65/19 66/22 70/24 76/13 52/24 53/10 56/4 56/5 56/14 57/6 64/19 results [8] 39/23 40/3 44/18 46/6 50/9 36/10 67/21 69/12 70/8 71/13 82/1 50/23 56/8 66/20 selected [12] 42/11 46/11 46/18 47/18 recognized [3] 20/14 40/22 83/20 54/19 55/20 56/18 57/8 58/24 68/24 71/12 recognizes [1] 25/21 retained [1] 39/3 reconsider [2] 4/7 25/17 retention [1] 39/5 71/19 reconsideration [5] 3/20 80/11 83/13 88/1 selecting [11] 38/3 40/13 42/4 42/18 57/3 retrieving [2] 36/11 36/14 revelation [2] 84/13 84/25 reverse [3] 35/8 57/22 58/14 88/9 57/13 71/9 86/18 91/5 91/11 95/10 record [4] 3/8 46/12 88/1 98/9 selection [5] 41/15 47/7 49/5 50/15 75/15 records [1] 40/1 reversed [4] 4/12 4/16 29/14 37/5 selections [1] 38/7 recycled [1] 78/9 right [63] selects [2] 54/22 72/6 red [1] 69/19 rise [3] 92/7 92/13 92/17 semantic [1] 92/1 refer [2] 24/4 97/6 road [1] 43/14 sense [4] 68/21 79/17 81/9 81/25 sensing [1] 5/19 reference [14] 43/10 43/16 45/2 45/7 64/2 **ROI** [46] separate [3] 31/10 32/8 97/15 sequence [7] 76/11 76/12 77/4 77/5 77/8 76/6 78/2 80/1 80/14 81/21 85/1 85/14 ROIs [11] 44/23 45/8 45/16 46/11 47/17 47/19 47/22 47/22 49/16 50/9 65/23 85/19 92/25 references [3] 12/5 43/9 79/10 Room [1] 1/24 93/4 93/16 referred [4] 77/4 86/10 93/5 93/16 round [3] 33/16 39/7 75/4 series [2] 57/3 57/13 referring [1] 87/21 route [1] 20/3 set [27] 5/17 7/10 8/11 9/8 9/18 10/23 RPR [1] 1/23 rule [1] 21/20 refers [6] 24/10 85/17 94/11 94/12 94/14 11/21 13/6 13/7 13/18 16/8 23/2 23/6 28/11 95/6 29/12 30/14 30/21 31/11 34/2 37/4 37/7 regarding [1] 29/4 ruled [1] 88/2 44/4 46/5 55/7 55/9 57/21 70/10 rules [2] 21/21 78/14 sets [4] 5/13 28/5 48/8 56/7 regardless [1] 28/24 region [39] ruling [1] 4/7 setting [1] 91/16 regions [17] 39/1 44/17 44/17 48/8 48/17 running [1] 78/4 settings [6] 41/25 48/23 64/15 66/18 68/4 68/9 50/21 52/19 53/10 53/18 54/2 54/3 54/6 runs [1] 48/16 Russ [2] 2/6 3/10 60/25 61/7 61/12 63/3 71/19 seven [13] 7/11 7/12 23/10 23/14 23/19 rejected [4] 36/18 36/22 80/5 80/24 23/24 24/3 37/18 43/24 48/6 54/1 56/20 relates [1] 76/24 relative [2] 51/19 56/10 76/22 S.O.I.TEC [1] 70/11 several [1] 23/16 relatively [1] 54/2 said [45] sewed [1] 59/8 relaxation [17] 82/3 82/7 82/11 82/12 same [31] 20/14 35/10 40/4 43/14 43/24 shape [6] 7/24 9/18 13/6 16/8 41/23 69/13 82/20 82/24 83/21 84/20 93/12 93/14 94/24 44/3 45/5 45/8 45/12 45/20 46/1 46/4 46/17 shapes [2] 46/10 46/25 95/3 95/5 95/7 95/14 95/17 97/1 47/18 48/7 48/8 48/16 48/20 48/24 49/3 sheer [1] 66/1 49/3 49/16 49/18 50/25 54/20 55/24 58/16 relevant [1] 85/13 shifting [1] 78/17 rely [1] 65/10 shod [1] 50/16 64/9 75/12 76/24 92/10 remanded [1] 11/6 sample [2] 73/14 73/19 shortcut [1] 6/15 remember [1] 47/6 satisfied [1] 91/20 shorter [3] 79/4 81/16 96/18 reminding [1] 27/7 satisfy [5] 33/14 34/5 49/4 49/4 70/13 shot [1] 66/19 satisfying [2] 48/23 91/21 render [2] 9/3 91/22 renders [2] 38/5 80/23 should [11] 4/16 6/10 24/24 48/13 60/7 saw [2] 49/12 62/6 68/14 78/1 81/12 83/3 87/11 95/12 repeatable [2] 47/4 47/9 say [51] shouldn't [2] 22/21 60/1 repeatedly [1] 47/3 saying [7] 10/6 12/1 14/2 18/14 24/20 show [17] 30/15 30/21 30/25 31/10 31/12 repetition [10] 76/14 77/2 77/11 82/2 43/8 45/15 47/8 47/12 50/5 57/16 65/18 82/19 87/7 86/13 86/19 91/5 93/5 93/11 95/11 says [73] 67/16 73/15 73/17 74/12 89/3 scale [1] 58/13 scan [4] 48/8 48/20 49/3 78/5 replaced [1] 94/13 showed [6] 52/20 62/4 67/1 67/12 69/18 reply [2] 21/11 28/2 71/20 showing [7] 4/25 5/8 38/2 40/3 64/7 64/9 report [18] 40/22 40/24 41/7 45/25 47/22 scheduling [1] 65/5 48/7 48/7 50/1 50/4 50/4 55/25 65/25 66/10 |sciatic [9] 57/5 57/23 58/16 59/3 59/3 59/6 85/13 shown [13] 12/10 48/22 49/15 55/8 58/2 67/23 69/17 75/3 75/4 77/24 64/9 68/23 69/3 scope [4] 4/25 51/5 80/13 95/23 58/10 58/15 58/15 58/25 59/11 77/1 84/17 Reporter [1] 98/14 **REPORTER'S** [1] 1/17 score [1] 29/1 screen [9] 23/15 23/20 23/23 62/3 63/1 reports [4] 38/19 51/2 64/22 67/2 shows [19] 15/14 30/14 31/14 44/23 54/25 64/15 66/19 75/1 84/18 representative [6] 9/17 16/7 28/5 54/3 57/17 57/19 57/22 58/11 58/22 61/22 64/6 73/14 73/19 Seal [16] 4/14 4/18 6/8 7/10 7/11 22/4 67/14 74/1 80/1 80/14 80/21 80/21 81/16 require [2] 8/17 73/22 22/23 23/2 25/6 29/13 29/16 32/14 32/21 side [15] 18/16 18/19 19/1 23/24 39/8

suggest [10] 16/1 31/21 32/4 35/16 35/21 specification [20] 18/1 18/1 19/24 24/23 S 26/11 33/25 41/9 41/18 42/1 56/23 56/23 60/7 61/21 61/22 62/16 63/11 63/17 68/12 69/2 70/7 #:5347 36/2 50/8 50/16 64/16 79/15 age ID suggested [1] 71/8 side... 110 42/21 45/14 47/21 55/3 58/10 suggesting [1] 68/17 58/10 62/10 67/12 75/1 94/7 69/2 70/7 suggestion [3] 37/12 92/21 93/18 sides [2] 38/19 78/24 specificity [1] 73/22 specifics [2] 33/24 44/8 specified [2] 60/25 61/11 Siemans [1] 3/14 suggests [4] 36/3 45/4 46/9 94/6 SIEMENS [14] 1/11 3/5 3/14 31/13 32/2 Suite [1] 2/20 37/21 38/2 38/20 50/1 52/1 52/21 53/15 specifies [1] 17/18 summary [15] 40/12 75/21 78/15 78/17 86/8 93/8 specify [3] 8/16 56/21 60/10 78/18 78/21 79/2 83/3 83/9 83/11 83/12 Siemens' [6] 14/11 42/3 86/23 92/7 93/1 spelled [1] 87/12 93/23 93/24 94/6 97/3 97/18 spend [1] 77/20 Supp [1] 36/12 signal [8] 45/16 46/1 46/2 46/9 46/17 46/24 spent [2] 16/23 17/3 support [6] 35/15 47/7 47/10 50/5 70/2 70/3 60/12 60/14 spin [40] spin-spin [20] 82/2 82/6 82/11 82/12 84/20 significant [2] 95/24 95/25 supported [1] 17/25 significantly [1] 49/9 85/16 85/17 86/5 86/14 87/15 93/12 93/14 supports [2] 46/23 62/17 Silicon [1] 70/11 similar [3] 23/5 43/24 48/12 94/24 95/3 95/5 95/6 95/14 95/16 96/22 suppression [2] 53/5 79/11 sure [9] 18/17 21/6 27/18 47/20 62/1 62/23 simply [5] 42/3 67/24 85/25 94/6 96/2 spinal [5] 31/4 85/4 85/5 85/7 85/15 64/12 68/6 74/22 surgery [3] 31/1 31/2 59/2 since [1] 62/8 spreading [7] 7/12 22/23 22/24 22/25 single [8] 39/6 41/14 42/10 63/5 71/11 76/7 29/13 33/1 33/3 surgical [1] 59/1 Spring [1] 1/24 square [1] 75/15 surgically [1] 31/1 81/19 95/21 situation [8] 4/12 23/1 26/4 38/13 44/15 surprise [2] 22/22 68/1 84/19 84/24 96/17 stacked [1] 58/1 surprising [1] 22/14 stand [3] 16/3 94/25 97/18 Surprisingly [2] 84/8 84/9 situations [1] 84/15 six [24] 4/24 5/16 7/2 7/4 7/6 12/10 20/1 stand-alone [1] 94/25 surreply [1] 87/5 standard [14] 8/1 39/14 39/15 39/18 40/6 20/7 21/14 22/15 22/21 23/3 29/22 32/23 surround [2] 59/18 71/17 40/10 40/13 40/17 40/21 40/23 40/25 41/2 surrounded [1] 85/3 surrounding [26] 30/15 51/21 57/9 59/17 34/6 34/11 47/5 47/21 48/6 66/3 79/5 79/5 79/14 79/17 41/4 44/20 standing [1] 23/4 60/18 77/3 82/8 84/21 84/23 85/6 85/7 size [4] 41/23 43/19 49/21 69/13 sizes [2] 46/10 46/25 standpoint [1] 20/11 85/11 85/19 85/23 85/24 86/6 86/17 86/21 skill [11] 37/23 47/20 50/17 52/16 52/18 start [5] 3/18 3/20 19/3 20/25 81/2 87/16 93/15 95/18 95/21 96/18 96/23 97/2 52/22 53/8 56/2 72/24 73/24 75/13 started [1] 90/12 97/9 skilled [4] 9/21 13/3 13/3 47/24 state [3] 3/7 21/2 90/11 surrounds [1] 84/16 statement [3] 88/12 88/18 93/10 STATES [2] 1/1 1/23 slide [68] sutures [2] 59/5 59/8 slider [2] 55/16 72/4 sweeping [1] 46/24 slides [5] 3/23 23/11 37/17 47/13 54/20 stenographic [1] 98/9 synchronize [1] 12/12 slip [1] 50/16 synonymized [1] 24/6 step [72] slow [1] 21/5 step-plus-function [49] synonymous [1] 24/20 slug [1] 22/18 steps [24] 5/13 5/14 5/14 5/17 5/18 8/17 system [5] 12/9 12/12 54/12 63/20 64/19 SM [2] 52/7 54/9 13/7 15/8 17/12 17/22 18/2 18/5 24/1 24/3 small [2] 45/15 71/14 24/3 24/6 24/8 24/8 24/13 24/20 34/9 34/10 SN [2] 52/6 54/8 35/9 70/9 T2 [55] still [5] 18/4 27/4 43/2 46/22 81/21 so [110] tab [3] 23/18 23/19 37/16 software [16] 7/17 8/23 12/22 13/19 20/20 stipulate [1] 93/10 tack [4] 7/12 22/24 25/15 33/3 stipulated [2] 78/16 93/7 take [14] 25/15 40/21 55/21 56/5 57/11 33/7 33/10 33/17 35/13 35/14 35/18 35/19 stipulating [1] 93/4 stipulation [3] 86/11 86/22 87/11 35/23 36/1 54/23 67/25 59/14 61/11 67/13 77/2 79/9 79/16 82/18 solution [1] 90/25 84/24 88/6 SOLUTIONS [6] 1/11 3/5 3/14 50/2 52/1 stop [2] 16/21 75/19 taken [1] 59/1 takes [2] 55/13 56/18 story [1] 66/1 some [22] 10/8 12/23 19/6 19/6 21/21 Street [2] 1/24 2/20 taking [4] 34/9 34/10 46/20 59/12 talk [7] 20/6 21/3 21/3 22/4 74/13 76/13 23/11 23/21 24/5 26/21 27/1 27/1 31/1 31/1 strike [1] 65/8 33/10 34/4 51/25 59/5 61/7 69/23 75/7 strikes [1] 18/23 93/19 97/14 structure [6] 7/25 19/21 19/23 33/8 46/16 talked [5] 27/23 33/16 44/6 65/20 69/7 somebody [1] 10/8 talking [8] 17/6 21/24 28/12 34/19 64/4 46/16 Somebody's [1] 12/16 68/22 73/20 91/16 structures [1] 30/15 somehow [8] 65/23 71/9 79/22 80/4 86/24 struggled [1] 60/22 talks [5] 23/20 27/20 43/11 68/16 77/13 taught [1] 40/19 86/24 87/17 87/24 studies [3] 73/5 73/14 73/19 TE [7] 77/12 84/3 84/6 84/6 91/16 93/5 someone [3] 17/21 43/14 44/19 stuff [3] 55/15 55/18 57/23 something [22] 14/19 22/6 22/20 22/25 24/7 27/22 27/23 29/7 31/25 35/25 50/13 sub [2] 52/9 52/9 94/19 subarachnoid [1] 81/6 teach [2] 42/1 88/22 52/17 71/2 73/20 77/8 77/14 81/10 82/19 subject [1] 80/13 teaches [12] 43/1 47/12 50/25 52/6 52/23 90/8 92/15 95/12 96/8 subjective [6] 38/4 45/8 51/9 52/13 52/19 52/25 53/4 53/10 56/1 56/2 76/6 88/21 somewhere [1] 67/9 70/7 teaching [1] 47/8 teachings [1] 47/25 technique [3] 79/12 96/10 97/7 sorry [2] 49/2 82/6 submission [5] 61/13 62/6 65/20 69/10 sort [8] 20/17 20/24 27/1 27/1 41/25 44/9 69/25 59/6 69/22 submissions [1] 39/8 technique to [1] 79/12 sought [2] 80/11 93/23 submit [5] 13/11 35/5 73/1 73/14 74/5 techniques [1] 70/12 space [10] 78/12 79/23 80/2 80/9 80/12 submits [1] 67/23 technology [2] 17/14 17/20 submitted [10] 38/19 50/4 50/4 50/12 80/23 81/3 81/6 88/4 96/20 teeth [1] 79/1 66/19 67/2 70/20 75/10 77/24 97/25 telephone [1] 38/16 speak [1] 29/2 spec [4] 12/3 12/5 25/13 25/14 specific [12] 15/21 30/9 30/11 31/8 31/8 substantially [14] 45/19 82/7 83/21 84/14 television [1] 71/24 84/21 84/22 85/9 85/10 85/22 86/5 93/15 tell [31] 9/12 9/12 9/13 10/7 14/8 18/13 44/3 44/5 51/25 64/5 67/24 69/8 89/2 94/25 95/17 97/2 20/5 26/12 28/8 33/22 36/17 36/21 36/23 specifically [11] 35/22 38/21 40/6 43/3 such [3] 17/18 21/10 81/16 39/18 41/18 41/24 44/19 50/21 51/5 52/3 43/22 48/12 52/25 69/9 74/19 75/24 77/11 sufficient [2] 35/7 53/1 53/16 56/23 60/25 62/8 64/14 65/17 66/18

urge [2] 32/2 37/8 told [2] 76/4 77/25 too [2] 7/14 55/47 took [2] 57/25 76/18 Filed 01/03/12 urges [1], 34/23 f 36/2 56/23 57/6 73/13 feli... [4] 66/22 68/4 70/17 95/11 top [8] 46/8 54/25/58/5 58/7 59/2 69/7 telling [3] 43/17 44/16 54/9 95/11 tells [9] 12/14 24/11 33/20 41/11 43/3 83/19 84/8 USA [2] 1/11 3/6 53/22 54/15 57/6 59/11 totally [1] 16/18 use [41] used [21] 8/17 13/19 13/20 15/14 24/19 TR [4] 77/12 91/16 93/5 94/19 template [1] 43/20 ten [1] 46/9 track [1] 43/19 30/24 34/11 38/11 38/12 41/19 41/20 41/20 traditional [1] 22/12 transcript [2] 1/17 98/9 transitive [2] 6/2 6/3 term [15] 28/10 31/20 31/21 32/6 33/12 46/11 46/25 50/24 54/1 61/1 61/1 63/20 41/12 63/20 77/18 77/24 78/1 78/11 79/12 65/23 70/13 79/19 80/4 94/9 useless [1] 66/18 terms [4] 17/25 31/18 32/7 60/4 transmit [1] 36/21 user [7] 37/23 39/17 41/13 42/22 43/7 transmitted [1] 37/2 test [1] 49/7 43/17 78/4 transmitting [7] 22/16 29/6 29/11 36/20 users [1] 44/21 tested [1] 70/4 testified [1] 20/19 testify [1] 26/17 36/24 37/1 37/6 uses [3] 13/4 54/22 77/5 tries [1] 42/23 using [27] 3/23 16/5 19/18 24/5 26/21 testimony [8] 28/6 39/25 46/13 53/14 65/2 trigeminal [3] 80/1 80/16 80/17 26/23 30/19 36/11 36/14 42/4 47/17 54/14 troubled [1] 16/15 65/9 65/12 70/1 55/20 55/23 56/25 57/7 58/23 59/10 60/13 true [4] 6/4 15/20 49/5 98/8 60/23 67/25 72/12 75/4 75/5 77/14 84/6 text [1] 43/17 textbook [1] 38/10 try [2] 24/22 65/11 93/16 trying [2] 10/5 82/17 than [48] usually [1] 96/19 thank [12] 3/25 4/1 21/6 23/13 27/6 37/11 Tsuruda [1] 20/18 utilizing [1] 7/22 51/14 55/5 96/12 98/1 98/2 98/3 tune [2] 83/4 94/7 turn [3] 67/7 67/8 82/19 that [636] vague [1] 66/17 that's [59] turned [1] 62/5 their [45] TV [2] 67/7 67/8 valid [2] 36/4 59/25 valuable [1] 78/25 values [1] 77/3 variety [1] 41/21 them [12] 4/3 14/8 15/10 18/23 19/5 23/16 Twenty [1] 64/9 38/19 38/25 64/10 65/3 70/19 88/24 two [52] themselves [3] 50/24 75/1 80/20 two-centimeter [5] 58/2 58/24 61/21 68/12 then [42] 71/16 various [2] 16/12 76/5 theory [1] 16/2 type [3] 23/10 27/12 94/19 vector [5] 5/19 30/13 30/20 31/9 31/16 there [72] types [2] 84/13 95/7 venture [1] 16/25 there's [23] 16/3 18/9 20/3 20/15 21/10 verb [10] 5/24 6/3 6/4 6/9 22/6 22/19 22/24 22/19 39/22 40/21 40/22 41/1 41/3 41/5 27/22 27/23 35/17 41/22 42/21 45/16 55/1 65/21 67/20 69/8 U-n-g [1] 3/11 verbs [3] 6/2 6/5 33/1 U.S [1] 1/5 72/15 73/16 80/15 83/6 version [1] 78/9 therefore [3] 34/24 89/1 89/6 U.S.C [2] 21/8 21/14 versus [5] 3/5 48/5 68/19 68/19 88/12 therein [1] 52/12 ultimate [1] 20/13 very [12] 15/17 15/21 16/1 20/14 28/18 ultimately [2] 32/22 83/7 unclear [1] 14/7 these [36] 28/18 30/9 30/24 51/25 64/18 67/15 72/16 they [106] vessels [2] 68/25 68/25 uncontroverted [2] 40/12 40/20 they'd [1] 20/20 via [3] 61/13 63/9 70/23 they're [8] 5/6 44/21 58/14 59/2 64/4 73/24 undefined [1] 27/1 view [7] 18/22 20/12 65/14 90/20 92/6 92/7 82/17 83/7 under [14] 9/3 10/17 16/2 20/7 34/6 39/4 92/9 they've [3] 20/22 24/21 83/8 49/17 50/15 70/11 78/14 81/9 81/15 93/21 view and [1] 92/6 thing [15] 21/10 34/3 43/24 44/3 45/8 46/4 93/25 violating [1] 65/4 underlying [2] 38/2 88/23 49/18 50/25 56/14 70/2 74/12 76/7 76/24 virtually [1] 24/20 undermines [1] 50/17 95/1 95/21 vis [2] 67/10 67/10 things [12] 21/22 35/5 49/19 49/20 61/19 underneath [1] 47/23 vis-a-vis [1] 67/10 67/16 70/6 70/14 72/6 76/1 90/2 94/15 understand [9] 6/23 12/2 14/20 14/21 17/6 voxel [5] 41/14 42/10 63/5 68/9 71/14 think [43] 17/17 18/24 90/8 90/9 W thinking [3] 9/6 12/6 19/5 understanding [2] 17/24 88/11 thinks [2] 32/5 87/17 Third [1] 39/21 understands [1] 88/7 wait [6] 8/10 8/14 11/24 12/5 62/20 62/22 understood [1] 90/15 waiting [2] 76/23 76/25 Thirty [1] 21/8 undisputably [1] 7/5 waive [2] 86/15 96/25 Thirty-five [1] 21/8 undisputed [6] 51/20 52/23 75/2 85/1 waived [3] 86/25 87/10 87/17 thorough [1] 78/20 85/10 85/17 waiving [1] 88/8 undisputedly [1] 86/7 those [36] wake [1] 66/12 though [3] 23/3 58/13 66/3 unfeasible [2] 84/4 84/5 walk [8] 19/6 30/11 37/17 39/16 39/20 thought [5] 80/19 84/5 87/10 87/20 90/25 unfortunate [1] 81/8 39/25 61/22 75/23 thoughtful [1] 29/18 UNG [2] 2/7 3/11 walked [1] 61/19 unique [1] 92/15 want [33] three [56] three-dimensional [1] 28/4 uniqueness [1] 33/17 wanted [1] 25/23 threshold [8] 55/2 55/8 61/1 66/23 67/12 UNITED [2] 1/1 1/23 wants [3] 32/4 47/9 50/24 67/18 68/4 72/3 University [2] 31/5 58/6 warranted [2] 31/21 32/6 unknown [2] 30/22 31/3 unless [6] 5/8 60/1 61/3 68/8 89/3 96/24 thresholding [36] was [112] through [38] Washington [3] 2/20 31/5 58/6 throughout [1] 69/9 until [6] 31/3 61/12 69/9 72/4 73/18 86/25 wasn't [5] 20/23 23/4 33/6 70/4 88/3 time [36] unwilling [1] 4/23 way [50] up [31] 4/10 12/5 15/3 16/12 18/3 20/24 ways [11] 16/12 24/5 41/11 41/21 42/8 timely [1] 67/2 times [11] 49/10 59/24 60/10 78/5 79/4 22/9 23/21 25/2 31/3 31/14 37/16 40/4 45/5 44/3 50/22 51/4 61/7 64/20 65/19 81/19 85/4 85/13 85/13 91/17 95/12 46/5 55/9 55/14 55/14 58/1 63/1 65/6 67/8 we [164] tissue [59] 67/9 67/16 70/9 80/19 88/6 90/12 94/21 we'd [3] 38/18 38/18 38/19 tissues [1] 81/16 96/4 96/5 we'll [12] 3/23 15/3 31/12 31/13 31/22 today [4] 3/10 3/23 20/16 36/2 upon [7] 6/5 29/21 39/13 76/25 91/17 31/24 39/16 39/20 40/16 45/23 64/13 88/6 together [4] 59/9 92/7 92/13 92/17 93/21 94/9 we're [25] 3/11 7/16 11/25 12/8 13/25

76/17 91/16

wrong [6] 12/6 16/18 16/19 81/13 91/3

Wrongly 11, 23/17 Filed 01/03/12 Page 111 of 111 Page ID

#:5349 yeah [1] 46/19 year [1] 94/6 years [1] 16/11 yellow [1] 45/14 ves [27] 4/3 6/11 6/25 8/13 9/16 11/12 15/13 16/8 17/14 17/21 18/15 30/16 34/22 42/20 49/6 51/23 55/4 55/12 58/8 58/19 69/21 71/7 71/23 73/3 75/22 89/9 91/9 yesterday [1] 30/25 yet [3] 31/16 49/23 84/1 you [315] you that [1] 73/1 you'd [11] 12/3 12/4 15/18 19/23 26/1 26/3 42/17 44/3 46/19 74/3 86/19 you'll [4] 30/10 43/16 45/6 45/14 you're [9] 6/17 7/11 10/6 14/15 15/25 16/5 17/6 18/14 44/15 you've [2] 18/22 51/13 your [157]

## 7

94/9

Zawadzki [18] 38/23 38/24 39/2 40/7 40/23 41/9 42/6 43/11 47/1 48/3 48/21 50/23 61/18 66/16 66/22 69/11 70/6 87/2 Zawadzki's [1] 80/25 zoom [1] 22/10 zoomed [2] 64/10 74/2